Royal Commission into
Victoria's Mental Health System

WITNESS STATEMENT OF GEORGINA HARMAN

I, Georgina Harman, Chief Executive Officer, of Beyond Blue, PO Box 6100, Hawthorn West, Victoria 3122, say as follows:

1 I make this statement on the basis of my own knowledge, save where otherwise stated. Where I make statements based on information provided to me by others, I believe such information to be true.

Background

2 I have been the CEO of Beyond Blue since May 2014. Attached to this statement and marked 'GH-1' is an outline of what Beyond Blue does. Before that, I was the Deputy CEO of, and helped establish, the National Mental Health Commission. From 2006-2012 I was a senior executive at the Commonwealth Department of Health & Ageing, during which time my portfolio responsibilities included national policy and programs in mental health, suicide prevention, substance misuse, tobacco control, cancer, chronic diseases and management of Australia's blood supply. I also led national reforms to lift Australia's organ and tissue donation rates and have worked in the HIV/AIDS sector in Australia and the UK.

3 I am a Board Director of Mental Health Australia and a Board Director of the Victorian Pride Centre. I am also a member of several advisory bodies and alliances in the mental health and suicide prevention sector.

What is meant by 'determinants' of mental health?

4 Our mental health is shaped by individual and environmental attributes and actions. They have biological, psychological, behavioural, social, economic and environmental dimensions. While some of these determinants (e.g. biological) are not always preventable, there is much that can be done in the realm of social determinants, which the World Health Organization (WHO) has found shape mental health and the risk of developing mental health conditions to a great extent.

5 The WHO describes the social determinants of health as "the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries."[1]

What are the principal determinants of mental health that have been identified in research relevant to Australia?

6 Although Australia has some distinct social, cultural and geographic features, the social determinants of mental health are common across the world, as the WHO has shown. These include:

- Trauma (e.g. sexual assault, violence) especially in childhood;
- Poverty, income levels;
- Education and literacy;
- Employment/unemployment;
- Housing/homelessness;
- Social supports and connection;
- Access to health services;
- Healthy/unhealthy behaviours (e.g. use of alcohol and other drugs);
- Incarceration;
- Biology and genetic endowment;
- Gender; and
- Culture.

7 The WHO report on social determinants[ii] and the Marmot Review from the UK[iii] give detailed examinations of these kinds of factors and the solutions associated with addressing them. For instance, the WHO found:

> *Analysis of exposure over the life-course to advantage and disadvantage shows that these negative and positive factors and processes accumulate over time, influencing epigenetical, psychosocial, physiological, and behavioural attributes among individuals as well as social conditions in families, communities, and social groups including gender. This accumulation of advantage and disadvantage leads to social and economic inequities and consequently to inequitable mental and physical health outcomes… Taking a life-course perspective recognizes that the influences that operate at each stage of life can change the vulnerability and exposure to harmful processes, or stressors. Social arrangements and institutions, like preschool, school, the labour market and pension systems have a significant impact on the opportunities that empower people to choose their own course in life.*[iv]

8 The Marmot Review emphasised the relationship between socioeconomic status and health outcomes, including mental health. It gives this example:

> *People with* higher *socioeconomic position in society have a greater array of life chances and more opportunities to lead a flourishing life. They also have better health. The two are linked: the more favoured people are, socially and economically, the better their health. This link between social conditions and health is not a footnote to the 'real' concerns with health – health care and unhealthy behaviours – it should become the main focus. Consider one measure of social position: education. People with university degrees have better health and longer lives than those without. For people aged 30 and above, if everyone without a degree had their death rate reduced to that of people with degrees, there would be 202,000 fewer premature deaths each year. Surely this is a goal worth striving for.*[v]

9 In Australia, VicHealth has reviewed the socioeconomic factors associated with mental health. It found, among other things:

> *The Victorian Population Health Survey data identifies adults more likely to be categorised as experiencing psychological distress (Kessler 10 scores greater than or equal to 22) were those persons with lower education levels; those unemployed or not in the labour force; those in non-professional occupations; those who did not have private health insurance coverage; those with lower income levels; those living in rented dwellings (DHS 2003; DHS 2004) and those born overseas (DHS 2004).* [vi]

What is the correlation between socio-economic factors (including poverty, unemployment, housing and education) and the development of mental illness?

10 The following correlations inform this:

- Depression is 1.5 to 2 times more prevalent among the low-income groups of a population.[vii]
- Children living in low SES households and disadvantaged neighbourhoods experience more anxiety, depression, substance abuse and delinquent behaviour, and poor adaptive functioning.[viii]
- A systematic review of the literature found that the prevalence of depressed mood or anxiety was 2.5 times higher among young people aged 10 to 15 years with low socioeconomic status than among youths with high socioeconomic status.[ix]

- Among children as young as three and five years of age, socioemotional and behavioural difficulties have been shown to be inversely distributed by household wealth as a measure of socioeconomic position (WHO).[x]
- The association between low income and mental health conditions is accounted for by debt in some studies. A population study in England, Wales, and Scotland found that the more debt people had, the more likely they were to have some form of mental health condition, even after adjustment for income and other sociodemographic variables (WHO).[xi]
- Unemployed people experience higher levels of depression, anxiety and distress.[xii]
- Homelessness and inadequate housing conditions are associated with poor mental health.[xiii]
- In fact, more than half of homeless young people are experiencing severe psychological distress.[xiv]

11 VicHealth found that "*What defines inequities in health is the social gradient. Not only is there a 'gap' in health outcomes between the most well-off in society and the most disadvantaged, there is also a graded effect, whereby increasing social position is associated with improved health outcomes. The social gradient is clear for mental wellbeing outcomes in adults and is evident in children as young as three years old.*"[xv]

12 Consequently, according to the WHO, policies to address health inequalities need to be both universal and proportionate to need. Targeting resources at only the most disadvantaged groups detracts from the overall goal of reducing the steepness of the social gradient.[xvi]

13 Since risk and protective factors for mental health act at several different levels, responses to them need to be multi-layered and multi-sectoral. Health, community services, education, welfare, justice, transport and housing sectors all need to be concerned and involved, and contribute to a 'health in all policies' approach.[xvii]

What is meant by 'resilience' in the context of creating the best mental-health outcomes?

14 Put simply, resilience is doing well during or after an adverse event, or a period of adversity.

15 People who are resilient cope better with and 'bounce back' from difficult experiences and, as a result, are less likely to develop or experience mental health issues. The benefits of resilience extend to the broader community through a reduction in the costs of mental health treatment, and all the associated social and economic benefits that go with good mental health (e.g. community participation, participation in education and work).[xviii]

16 Resilience is not static but something that can change over time due to experiences and circumstance. Individual, family and community resilience is something that can be fostered and developed over time. At an individual level, the sources of resilience are individual, environmental and the result of interaction between individual and environmental factors.

17 The best time to build resiliency is in the early years. Evidence shows that being resilient, from an early age, is associated with fewer mental health issues and greater life opportunities (including in employment and healthy relationships) over the long term. Resilience is supported by a range of conditions including factors within the child (e.g. child's own skills), their family (e.g. positive family relationships) and community (e.g. positive educational settings).

18 Improving children's resilience helps them to deal with the ups and downs they experience. It provides a foundation for developing skills and habits (e.g. coping skills, healthy thinking habits) that enable them to deal with later adversities during adolescence and adulthood. Resilience is also important for children's mental health; children with greater levels of resilience are better able to manage stress, a common response to difficult events or adversities. Stress is a risk factor for mental health conditions if the level of stress is severe and/or ongoing.

19 Interventions that build resilience are important for all children (universal interventions), including those at risk of poorer outcomes as a result of socio-economic and other forms of disadvantage (targeted interventions). Universal and targeted approaches to building resilience have potential social and economic benefits to society, including better mental health outcomes for children and savings in costs related to mental ill health.

20 Removing adversity is always preferable to building resilience. However, it is not always possible to prevent some of life's stressors such as natural disasters, parent separation and deaths in families. We can, however, build children's resilience so they can better manage life's adversities when they occur.

21 To better understand resilience in children, Beyond Blue commissioned the Parenting Research Centre and the Australian Research Alliance for Children and Youth (ARACY) in 2017 to:

- develop an evidence base to inform the design and implementation of programs that promote children's resilience; and
- translate the evidence into a practical guide to assist professionals to develop interventions and influence their practice that promote resilience in children aged 0–12 years.

22 The product of this research, Beyond Blue's *Building resilience in children aged 0–12: A practice guide* (the "Practice Guide"), aims to create a shared understanding of children's resilience and assist practitioners to promote and build children's resilience through everyday strategies and structured interventions.[xix] The guide was created for practitioners working across a broad range of settings including early childhood education and care settings, primary schools, welfare and community-based health and mental health settings.

23 The Practice Guide is informed by the findings of existing international research and new research including consensus-building (Delphi technique) among Australian experts, in-depth consultation with practitioners working with children and families, and the experiences, perceptions and voices of parents and children.

24 The guide provides a shared and common language for resilience and offers practical strategies for incorporation into applied settings, as well as information about how to design structured interventions to promote children's resilience.

25 The research found that practitioners can promote children's resilience by:

- using everyday contact and practice opportunities to discuss resilience and teach skills relevant to building resilience;
- implementing interventions and strategies that build and enhance supportive relationships between children and significant people in their lives (e.g. parents, peers, educators);
- implementing interventions and strategies that enhance family cohesion or create a positive family atmosphere and environment;
- enhancing resilience during significant universal transitions (e.g. primary to secondary school) and other significant transition points (e.g. parental separation); and
- implementing existing age-appropriate interventions that have been shown to produce positive change.

26 We also used the underpinning research to the Practice Guide to develop practical tips for families – simple things that can be done at home – to help them build resilience in their children.[xx]

What role does resilience play in early intervention or in the mental health system generally?

27 Resilience plays a fundamental role in both prevention and early intervention to help people protect their mental health or achieve their best possible mental health.

28 Evidence-based early interventions, that focus on building resilience, deliver the largest return on investment for individual wellbeing and the economy. KPMG's *Investing to Save* report, commissioned by Mental Health Australia (2018), suggests that reducing childhood mental health issues could save around $48 billion per year, a return on investment of $7.90 for every dollar invested.[xxi]

29 A range of high-quality systematic reviews have demonstrated that preventative, early intervention approaches have consistently significant effects in reducing behavioural issues, internalising symptoms and disorders and depression and anxiety in children and adolescents.

30 For example, Beyond Blue recently commissioned the Sax Institute to conduct a literature review of interventions (manualised programs and other services) that are implemented in childhood and adolescence with the aim of preventing anxiety and depression-related conditions and symptoms. The research found there is high-quality evidence of effectiveness for programs that prevent and intervene early in mild depression and anxiety in children and young people. The majority of the included reviews summarised evaluations examining school-based psychological interventions. Meta analyses of these interventions revealed small but significant post-intervention effects in preventing anxiety and depression. Attached to this statement and marked 'GH-2' is a copy of the *Sax Institute Evidence Check: Depression and Anxiety Programs for Children and Young People*.

31 This is important because half of all lifelong mental health issues emerge before the age of 14. One in seven young people aged between four and 17 experiences a mental health issue in any given year – that is 560,000 children and young people. Children spend around 30 hours at schools or in care each week, so educators are confronted with this every day.

32 There are a range of programs operating both within Australia and internationally that have an established or developing evidence base demonstrating the efficacy of taking an early intervention approach, especially when those approaches involve educators, children, and families and carers in a holistic way to focus on helping children develop their social and emotional skills.

33 Also in Australia, Nest – What Works for Kids[xxii] (WW4K), an initiative of the Australian Research Alliance for Children and Youth (ARACY) Prevention Science Network, is a searchable online database and networking site for researchers, practitioners and policymakers working to improve the wellbeing of children and young people. WW4K conducts rapid evidence assessments on programs in order to assess the likelihood that they will have a significant positive impact on the wellbeing of children. A similar project in the United Kingdom, the Early Intervention Foundation (EIF) Guidebook,[xxiii] rates the

strength of evidence for a program and its relative costs. For a program to receive the highest rating in the EIF Guidebook it must have evidence of a long-term positive impact through multiple positive evaluations; at least one of the studies must have evidence of improving a child outcome lasting a year or longer. Several of the programs rated by the EIF as evidence-based are available in Australia, including the Promoting Alternative Thinking Strategies (PATHS) program. PATHS targets the development of social and emotional skills, self-regulation, decision-making and conflict resolution skills in children, thereby building children's protective factors and decreasing the risk of behavioural and social problems. PATHS provides age-specific classroom modules for educators.

34 Despite evidence for the efficacy of such approaches, they are not universally available, so families and individuals (often those who need it most) miss out.

35 Reasons are multifactorial, and may include:

- A tendency to focus on health policy and health-settings, forgetting that social determinants play such a major role in resilience. As VicHealth says, "*Children with very high resilience in low-income environments still report poorer outcomes than children with very low resilience in high income settings. Investment in childhood mental wellbeing without simultaneous improvements in the material and economic resources needed for optimal development will continue to produce health inequities over the lifetime of an individual.*" [xxiv]
- A lack of relative recognition of the value of starting in the early years rather than adolescence, which requires different policy and service responses to traditional bio-medical, health-focused ones.
- Short-term funding and a propensity to invest in pilots and then not plan for or allow their scaling if they show promising outcomes. It is often more challenging and takes longer to measure discernible outcomes and there may be insufficient investment in mixed method evaluation and/or difficulty accessing or linking data held by different jurisdictional entities.
- At a macro level – despite bipartisanship and significant political, sector and community attention, goodwill and effort, increased investment and several national strategies and plans – as a nation we have not to date been able to successfully plan, implement and continuously measure a truly balanced mental health system for the long term; funded for the long term; using a social determinants, person-centred, integrated stepped-care approach – from promotion, prevention and early intervention to treatment, services and support embedded in the community, to acute and crisis support and interventions.
- As such this Royal Commission, and the current Productivity Inquiry into Mental Health, have the opportunity to build on the findings and recommendations of

other reviews and inquiries, including *Contributing Lives, Thriving Communities*, the National Mental Health Commission's 2014 review of Australia's mental health programmes and services, and make structural, co-designed recommendations that are implemented over time.[xxv]

36 Both the Australian Institute of Family Studies and the Victorian Department of Health and Human Services have created repositories of evidence-based programs for use in child and family services.[xxvi] However, these repositories exist to validate program design, which may or may not be taken up by individual governments or service providers, rather than pointing to widely available programs.

37 For example, a trial of the *What were we thinking* (WWWT) program showed "*there was a significantly lower prevalence of mild-to-moderate symptoms of depression and anxiety in women who participated in the WWWT program compared to the control group*".[xxvii] However, the program relies on parents implementing it themselves through worksheets or professionals choosing to use resources provided on the website.[xxviii]

38 A further issue is digital exclusion. Up to 2.5 million Australians do not have internet access and that this is especially reflected in groups with low incomes, lower education, those who are geographically more isolated, older people and Aboriginal and Torres Strait Islander peoples.[xxix]

Are there any past or ongoing initiatives of Beyond Blue in relation to resilience, either in youth and children, or in adults?

Current initiatives:

39 Building resilience is a focus of all of Beyond Blue's major universal, national activities. We hope our significant national reach and well-known, trusted name helps to bring people more easily into self-reflection, problem identification and support-seeking responses. Examples are given below.

40 **Be You** (https://beyou.edu.au/) is a Commonwealth-funded initiative, led by Beyond Blue and delivered in partnership with Early Childhood Australia and headspace. Launched in November 2018, Be You is free to every Australian early learning service, primary and secondary school. It aims to support all early learning services and schools to become mentally healthy learning communities; to embed social and emotional learning in pedagogy and practice; and to lift literacy and action across the whole learning community.

41 The free accredited professional development and other resources for educators has a strong focus on building resilience.[xxx] The professional development is open source so parents, carers and professionals working with children and young people can access it.

42 Be You is designed to deliver in practice the recommended approach of the 2018 report of The Lancet Commission on Global Mental Health and Sustainable Development, which states the most effective universal social and emotional learning interventions use a whole-school approach in which social and emotional learning is supported by a school ethos and a physical and social environment that is health enabling involving staff, students, parents, and the local community.[xxxi]

43 Be You also addresses many issues highlighted by the National Mental Health Commission's 2014 review of mental health programs and services, *Contributing Lives, Thriving Communities*.[xxxii] The Commission called for a shift in "*the pendulum in Commonwealth expenditure away from acute illness and crisis towards primary prevention, early intervention and a continuous pathway to recovery*"; reinforced the importance of starting early in life, and the importance of education settings in prevention and early intervention and to support mental health literacy and wellbeing. However, the Commission also raised concern about the plethora, and siloed implementation, of initiatives in early learning and schools, and called for better integration and consolidation.

44 Be You is integrated and end-to-end across the continuum of age, career stage and need: from the early years to age 18; from pre-service teachers in tertiary studies to the most experienced educators; and from promotion, prevention and early intervention to postvention support in the case of a death or critical incident in a school community. It aims to increase the knowledge, skills and confidence of educators so they can build stronger social and emotional skills in the children and young people they teach. The accredited professional development package is supported by 70 trained staff around the country to help services and schools develop individualised strategies and action plans.

45 Launched in November 2018, over 2,200 early learning services and over 4,100 primary and secondary schools have to date registered to become Be You learning communities; more than 52,000 individuals have signed up for the accredited professional development; and over 30,000 professional development modules have been completed.

46 Importantly, Be You has been designed for the education sector and busy educators. It is built to align with national priorities such as the National Quality Standards, Australian Curriculum and Australian professional Standards for Principals and Teachers: each professional development module identifies how content reinforces educators' understanding of these key priorities. Be You is also designed to be complementary to, and mutually reinforcing of, State and Territory education frameworks and initiatives. For instance, in Victoria, a Be You implementation and engagement group has provided advice, expertise and support with the design. This group included representatives from the Departments of Education and Health and Human Services, Primary Health Networks, and school, early childhood and educator associations. Consequently, the Be You professional learning and other resources are aligned with the Mental Health and

Wellbeing benchmarks in the Achievement program, which has been working in Victorian schools and early childhood services since 2012.

47 **Healthy Families** (https://healthyfamilies.beyondblue.org.au/) provides practical resources to build resilience and support mentally healthy parents and carers, from pregnancy to the teenage years. Healthy Families includes Dadvice for new dads and Just Speak Up which focuses on perinatal depression.

48 **Heads Up** (https://www.headsup.org.au/) facilitates the adoption of workplace mental health strategies in workplaces big and small across Australia: lifting resilience, recovery and productivity.

49 Access and availability: Programs like those outlined above are widely available and accessible via the internet. In the case of Be You, the online support and tools are accompanied by 70 trained staff around the country. However, online universal or targeted programs, while achieving impact at scale, should be accompanied by targeted strategies to overcome issues of digital exclusion (see 38 above).

50 Furthermore, people may need support beyond the level of increasing mental health literacy and general strategies for improving wellbeing or coping with mental health issues. These people need support that meets their own individual and family context, which may require engagement over the phone, face to face, with a peer worker or other professional.

Research and resources:

51 In 2016-2017, Beyond Blue commissioned the Parenting Research Centre and ARACY to work with us to explore, build consensus on, and develop translatable actions to support children's resilience. A key outcome was the development of the Practice Guide to assist professionals to develop interventions that promote resilience in children aged 0-12 years. The Practice Guide is informed by international research, in-depth consultation with Australian practitioners working with families and children, and the experiences, perceptions and voices of parents and children. Paragraphs 21 to 25 above have further information about the Practice Guide and its professional application.

What are the key features that are most likely to make resilience initiatives successful?

52 The Children's Resilience Research Project[xxxiii] (2017) identified the key features that support effective resilience initiatives. These include:

- Resilience interventions should be individualised, tailored to the child's developmental stage, and continuous;

- Strategies that can be used opportunistically by professionals to promote resilience (i.e. everyday strategies) may be as important as structured interventions;
- Factors that resilience initiatives and interventions should address include: family relationships, peer relationships; and pro-social skills and empathy;
- The best groups of people to target are: children themselves, parents/carers; and children's families (i.e. including parents/carers, siblings and other family members);
- Resilience measures should be: age appropriate; measured at multiple points over time; and multi-dimensional;
- Focusing on enhancing resilience during significant development points or transitions (e.g. primary to secondary school) and other major life events (e.g. parental separation) is important; and
- More long-term intensive and deliberate approaches to resilience may be required to support vulnerable and at-risk children and their families and carers.

What do you understand to be meant by the terms 'early intervention', 'early detection' and 'prevention' with respect to mental illness? In particular, what does 'early' mean?

53 The Prevention First Framework published by Everymind[xxxiv] gives some helpful definitions:

- **Primary Prevention** – Initiatives and strategies to *prevent the onset or development* of mental ill-health.
- **Secondary Prevention** – Initiatives and strategies to *lower the severity and duration* of an illness through early intervention.
- **Tertiary Prevention** – Interventions and strategies to *reduce the impact* of mental ill-health on a person's life, through approaches such as rehabilitation and relapse prevention.

54 Thinking about mental health in this framework, and not as a static state:

- early intervention initiatives (from education and awareness, to supports and services) are for people at all ages and stages of life (not just children) who are experiencing the first signs and symptoms of emotional, psychological and behavioural issues;
- early intervention is classified as a 'secondary prevention' approach that includes both early detection and early treatment. So, 'early' in this context specifically refers to the window of opportunity to recognise and act at the emergence of

mental health issues, in order to stop or minimise any avoidable progression of ill health; and

- signs and symptoms vary according to the type and of mental health condition, so better 'detection' – picking up or recognising that feelings, thoughts, behaviours and symptoms are affecting healthy functioning – relies on increasing everyone's mental health literacy, their ability to have a helpful conversation and themselves seek, or support someone to get, advice and help.

55 Primary Prevention can support those people with good mental health to stay well and avoid mental health conditions. This is important because around 60 per cent of the Australian population has good mental health and we want it to stay that way. Supporting those who are well with information, advice and self-help resources, helps people to continue to experience good mental health and foster resilience to help them bounce back from the everyday life challenges they may experience.

56 Although it is always more effective (for both cost and impact) to tackle health problems as early as possible, and ideally to stop them from occurring in the first place, the proportion of Australia's health budget allocated to Primary Prevention is only 1.34 per cent ($2B).[xxxv] The notion that 'prevention is better than cure' may be well known but we have a long way to go before we can say prevention shapes our nation's mental health investment and measurement strategy.

What is the significance of intervention early in life, in preventing and addressing mental illness?

57 There are a number of points to note:

- Almost half of Australia's population will experience a mental health issue over their lifetime. One quarter will experience anxiety and one in seven will experience depression.[xxxvi]
- Adverse childhood experiences have lifelong effects: child maltreatment accounts for between 16 to 33 per cent of depression, anxiety and self-harm in Australian adults.
- Half of all mental health conditions begin before the age of 14, [xxxvii] and around three quarters by age 25. [xxxviii]
- One in seven Australian children aged 4 – 11 years experience a mental health issue each year.[xxxix]
- The suicide rate among young people is at the highest level in over a decade, and now accounts for around one-third of all deaths in those aged 15 to 24.[xl]

- The impact of these issues can be significantly reduced by intervening early. In this context, 'early' can mean both intervening in the early years and at the early stages of a mental health issue developing.

58 Australia has come a long way in recent years in the area of youth mental health and that continues to be an area for attention and investment. However, if by the age of 14 one in every two people who will develop a mental health condition has already been affected, waiting until the teenage years can be too late. The first 1,000 days has the greatest potential to impact health and wellbeing throughout our lives.[xii] Students with persistent emotional or behavioural problems in Year 3, fall a year behind their peers in numeracy by Year 7, with similar, although smaller trends, in reading.[xiii] This education gap can persist or worsen across a child's education.

59 Starting early is the most powerful means of changing Australia's mental health trajectory at a population level and reducing the incidence of mental health conditions. The World Health Organization concludes that: "*While comprehensive action across the life course is needed, scientific consensus is considerable that giving every child the best possible start will generate the greatest societal and mental health benefits.*"[xiii]

What research has Beyond Blue completed or funded with respect to early intervention or detection, and what does that research say?

60 Since 2000, Beyond Blue has invested approximately $70 million across 300 mixed method research projects focused on depression, anxiety and suicide prevention. This has included support for research which shows the effectiveness of prevention and early intervention in the places where people live, work and learn.

Early childhood

61 In 2018 Beyond Blue commissioned the Sax Institute to review the evidence on preventing anxiety and depression in childhood. A range of high-quality systematic reviews have demonstrated that preventative approaches have consistently significant effects in reducing anxiety, depression and internalising symptoms and disorders in children and adolescents.[xiv]

- Despite strong evidence for the efficacy of a range of programs, they are not widely available in Australia. See the Sax Institute evidence check at attachment 'GH-2' to this statement. Also attached to this statement and marked 'GH-3' is a document outlining relevant programs. There is no national framework under which they would be delivered or funded. Implementation is therefore limited to pilot programs, which have limited reach and lifespan.

- Beyond Blue continues, with others, to advocate for a national network of integrated children's mental health and wellbeing supports and services, so every child and parent/caregiver can access multidisciplinary professional and peer support online and in their local communities.

Workplace

62 Beyond Blue is an active member of the Mentally Healthy Workplace Alliance, which will be developing a National Workplace Initiative to bring together in one best practice hub the evidence, tools, resources and links to assist workplaces to become and stay mentally healthy. The 2019 Federal Budget committed funding to the Alliance via the National Mental Health Commission to develop this initiative. While engagement will determine the final design and implementation details, the National Workplace Initiative could include:

- **A definitive national workplace mental health online resource, detailing 'what works' and clear, step-by-step processes for taking action.** All employers would be able to voluntarily choose a level of commitment that reflects their maturity and aspirations, providing employers with a pathway that suits their needs, including their legal obligations, and where appropriate, more aspirational attainment, such as becoming an employer of choice in respect to mentally healthy workplace culture and practices.
- **Simple, practical implementation guidance material.** Including a suite of online tools and guides to assist workplaces to convert their mental health strategies into action.
- **Implementation support** to help workplaces navigate, develop, implement and measure workplace mental health strategies; and identify case studies and workplace mental health champions within business and industry to encourage adoption and knowledge exchange.

This will link to and not duplicate State and Territory Workplace Health & Safety/Workcover Schemes. It will aim to support Australia's 13 million workers and more than two million business owners to achieve their best possible mental health, to reduce stigma, to have positive cultures and encourage people to seek help early to support their recovery from stress or mental health conditions. More detailed information on workplace mental health can be found at the Heads Up website (https://www.headsup.org.au/) and in the Mentally Healthy Workplace Alliance's submission to the Productivity Commission Inquiry into mental health.[xiv]

63 Almost one-quarter of the workforce experience mild symptoms of depression that leads to absenteeism of 50 hours per person per year. A further 8 per cent experience moderate to severe symptoms of depression that leads to absenteeism of up to 138 hours per person per year.[xvi]

64 A PwC study found that Australian workplaces can expect a positive return on investment (ROI) of 2.3:1, or an average of $2.30 in benefits for every dollar invested in workplace mental health.[xlvii] This is supported by international evidence that suggests an average ROI of 4.2:1.[xlviii]

Community

65 Low intensity programs, such as NewAccess, offer evidence-based support for people with mild to moderate anxiety and depression.

66 NewAccess in an innovative early intervention service that commenced in Australia in 2013 and is currently implemented in 17 locations Australia-wide. The program is funded regionally, by local Primary Health Networks. Sites include metropolitan areas, such as Brisbane and the Australian Capital Territory, and regional towns, such as Mt Isa in North-West Queensland.

67 The service utilises Low-intensity Cognitive Behavioural Therapy for people with mild to moderate depression and/or anxiety. It is based on the successful UK Improving Access to Psychological Therapies (IAPT) initiative, which was shown to be effective in treating mild to moderate depression or anxiety.[xlix]

68 The program model is unique in the Australian mental health sector for several reasons:

- People can self-refer – a health professional referral is not required;
- It was specifically designed to reduce stigma associated with accessing mental health services;
- It is delivered by a specially trained, new and locally employed coach workforce (with clinical supervision), thereby freeing up psychologists and other highly trained mental health workers to undertake higher-intensity interventions with people who have more complex needs. Coaches come from all walks of life, understand the local context and often themselves have personal experience of depression and anxiety.;
- It currently provides up to six sessions free of charge, with no co-payment;
- Sessions can be delivered in a variety of formats: face-to-face, via telephone or telehealth; and
- Clinical and wellbeing outcomes are measured at every contact between the coach and person and are visible in real time, over time, to the person, the coach, the clinical supervisor and funders.

69 The program structure is highly compatible with a 'stepped-care model' of mental health care, meaning that whilst it targets people with low to moderate needs, it can provide

'step-up' referrals to those requiring more intensive assistance. NewAccess Coaches, in consultation with their clinical supervisor, refer people with more acute needs or who are in crisis to more appropriate services via their GP and PHN, and initiate risk procedures in the cases where high-risk clients need more support.

70 An evaluation of the pilot by Ernst and Young[1] found:

- High referral acceptance and retention rates: 88 per cent of all people referred to the program proceeded to treatment, and 72 per cent continued treatment to completion.;
- High recovery rates: 67.5 per cent of people who participated in the trial were below the clinical threshold for anxiety and depression when they finished treatment. Recovery rates in current services are now lifting to 70 per cent and beyond; and
- The program is cost effective: the indicated cost-benefit ratio is 1.5. It also reduces the level of demand on upstream services.

71 Although they play a fundamental role in the stepped-care framework for mental health, evidence-based, evaluated low-intensity services like NewAccess are not widely available and do not exist within a universal funding framework that would make them sustainable and increase accessibility. Additionally, even where they do exist, they are often not widely recognised or utilised by key referral points, such as GPs. Awareness of the role that low intensity services can play and understanding the evidence for their efficacy need to be increased in order to see a larger uptake.

Latest research projects

72 Announced in May 2019, Beyond Blue is supporting the Centre of Research Excellence in Childhood Adversity and Mental Health, a $2.5 million five-year project led by the Murdoch Children's Research Institute and jointly funded by Beyond Blue and the National Health and Medical Research Council (NHMRC). Attached to this statement and marked 'GH-4' is a copy of a short summary of the aims and timeline of the Centre of Excellence Research in Childhood Adversity and Mental Health.

73 The Centre is led by Professor Harriet Hiscock (Murdoch Children's Research Institute) and involves researchers from across Australia, including Monash University, the University of Melbourne and the University of New South Wales. This five-year initiative (2019-23) will investigate which adverse childhood experiences and the developmental stages at which they occur are most associated with depression, anxiety and suicidality. It will research which interventions are most likely to be effective and aim to create a

sustainable service approach, co-designed with end-users, to improve children's mental health.

74 Beyond Blue has also partnered with the NHMRC in jointly funding a $2.5 million Targeted Call for Research to explore ways to prevent depression, anxiety and suicide among elderly Australians and on improving the detection and effective management of these conditions through new and existing interventions and models of care. Seven projects were successful and have been funded through this scheme. Attached to this statement and marked 'GH-5' is a document outlining these projects.

Past research projects

75 Attached to this statement and marked 'GH-6' is a document providing examples of past research relating to early intervention or detection.

76 A full list of Beyond Blue research projects can be found online (https://www.beyondblue.org.au/about-us/research-projects).

Why is early intervention important?

77 Early intervention supports and services can also make a huge difference both socially and economically. About half of people affected by mental ill health never seek treatment, or spend years suffering before they do.

78 Early intervention can reduce the impact and severity of mental health conditions.[II] We want people who are beginning to experience mental health issues to take steps early to prevent their symptoms worsening and for those who may have longer term issues to be supported to manage their mental health challenges and live contributing lives within their communities.

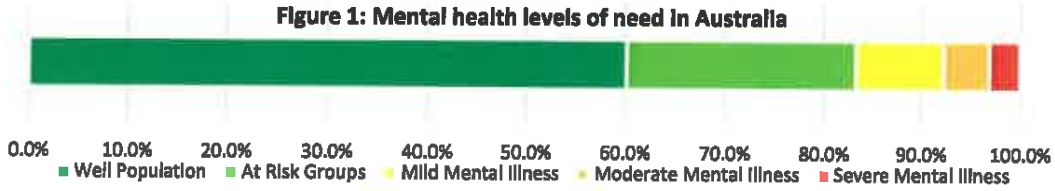
79 Most mental health issues can be dealt with effectively if the right supports are received early. An article in the Lancet notes that "early interventions can provide long term health and socioeconomic benefits by prevention of the onset of mental health problems and their development into chronic disorders".[III]

80 The concept of early intervention can be considered from three perspectives: early in life, early in illness and early in episode.[IIII] This threefold structure helps to identify the kinds of supports that are needed. Firstly, we cannot let up on increasing mental health awareness and literacy, and reducing stigma and discrimination (which work against both symptom recognition and help-seeking behaviours), at a population level, so that the early development of mental health issues is recognised and acted upon. We should be investing in proactively developing and protecting children's mental health, which sets us up for the rest of our lives. Where mental health issues do develop, people should be able

to access effective support and treatment as early as possible that reduces negative impacts and sets a positive path to recovery. Even for severe and complex mental health conditions, there is evidence to show that early intervention can be effective for children and young people[liv] and adults[lv].

81 Ninety-seven per cent of the population are either mentally well (60 per cent), at risk of developing a mental health condition (23 per cent) or have a mild to moderate mental health condition (14 per cent) – see Figure 1 below.[lvi] Most people (80 per cent) who have a mental health condition have mild-moderate depression or anxiety.

Figure 1: Mental health levels of need in Australia



82 Low intensity prevention and early intervention supports and services are what the great majority of our population needs to protect their mental health and recover from mental health issues relatively quickly, as detailed in the stepped-care model used by Primary Health Networks to plan and commission services and supports regionally (refer Figure 2 below). Services consistent with the UK National Institute for Health and Care Excellence (NICE) Guidelines,[lvii] such as coaching, digital support and self-guided interventions, can match the level and complexity of needs with the right service type and level.

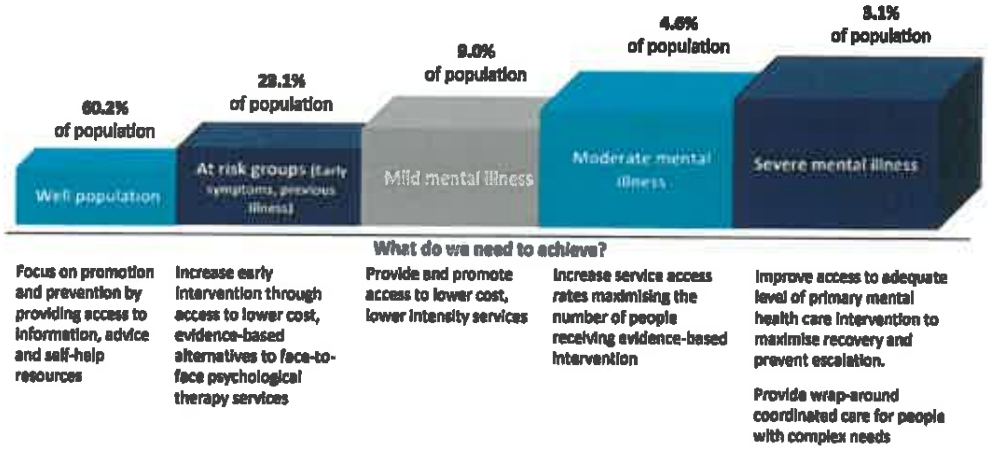


Figure 2: The stepped-care model [lviii]

What do you consider to be the relationship between mental illness prevention/early intervention and suicide prevention?

83 The relationship is not straightforward. To start with, not all people who take their own lives are experiencing mental illness and only some people who live with mental health issues become suicidal.

84 However, there are some clear links and risk factors:

- Suicide is a leading cause of death for people significantly affected by mental illness.[lix]
- Depression is a major cause of suicide.[lx]
- The suicide rate among people with a mental illness is at least seven times higher than the general population.[lxi]
- People recently discharged from psychiatric care are at higher risk of suicide.[lxii]
- People who have attempted suicide are at an increased risk of re-attempting and/or dying by suicide and can benefit enormously from person-centred aftercare when they are discharged from hospital following a suicide attempt. It is estimated that assertive follow-up interventions in the community – both clinical and psychosocial – which are tailored to a person's needs can reduce suicidal re-attempts by up to 20 per cent.[lxiii]
- Knowing someone who has recently died by suicide may also increase risk.[lxiv]

85 We must also remember that the causes of suicide are complex and individual to each person. Often people who are considering suicide are dealing with a combination of poor mental health and difficult life events. But with empathetic and effective treatments and social supports, and time, many who have thought about or tried to end their lives, find their way back to living.

86 Factors that may contribute to suicidal thinking and behaviours include: stressful life events including trauma, poor relationships, homelessness, unemployment and financial stress, mental illness, physical illness, drug or alcohol abuse, and poor living circumstances. By contrast, there are protective factors that make us more resilient and can reduce suicidal behaviour, such as: supportive social relationships, a sense of control, a sense of purpose, positive relationships and family harmony, effective help-seeking, meaningful work and connections to good health and community services.

87 It can be helpful to think of mental health as a dynamic continuum rather than a static binary which is either set to 'healthy' or 'mentally ill'. This continuum is impacted by all the dimensions of our lives – our physical health, our emotions, our thoughts, how we function

each day and the social and economic circumstances that we find ourselves in. Sometimes one of these areas is going particularly badly and sometimes all of them combine to have a greater impact. While suicide is not necessarily the outcome of struggling in one or more domains, attending to them will positively increase a person's mental health and wellbeing.

88 In 2014, Beyond Blue released the findings of a research project conducted by the Black Dog Institute in association with the NMHRC Centre of Research Excellence in Suicide Prevention.[lxv] This research revealed common risk factors and a common pathway leading to suicidal behaviour in men. Awareness of this pattern is important because it provides a guide for when and how to interrupt suicidal behaviour, and what warning signs may look like. Four traits or experiences were common among suicidal men:

- Depression or disturbed mood;
- Beliefs and personal values with strong emphasis on masculinity and stoicism;
- Stressful life events; and
- A tendency to withdraw, or avoid problems, in order to cope.

89 When these four features interacted and got worse over time, this increased the risk of suicide, and created various barriers to treatment or intervention. For example, men reported that having traditional 'masculine' beliefs often meant they felt shame, did not accept feelings or ask for help. Therefore, when stressful events happened, many withdrew or attempted to numb themselves with alcohol or drugs. This avoidance and isolation tended not to improve problems but made them worse, pushing people further along the path towards suicidality.

90 Research participants reported that suicidality tended to develop over three stages:

- Depression and stress interact, creating a downward spiral in mood and activity;
- Over time, these experiences lead men to have suicidal thoughts; and
- Finally, they 'hit bottom' and become hopeless. At this point they may attempt suicide.

91 The research also found that men may show subtle or more overt warning signs to family or friends, which can provide clues as to what stage of suicidality the person is in, as well as clues for the best way to intervene. Warning signs, therefore, act as a useful guide for how to interrupt the path towards suicide. Educating the community about these warning signs, and how to respond safely and with sensitivity, is an essential part of a multi-faceted strategy to prevent suicide.

92 Warning signs might include:

- A sense of hopelessness or no hope for the future;
- Isolation or feeling alone – "No one understands me";
- Aggressiveness and irritability – "Leave me alone";
- Possessing lethal means – medication, weapons;
- Negative view of self – "I'm worthless";
- Drastic changes in mood and behaviour;
- Frequently talking about death – "If I died would you miss me?";
- Self-harming behaviours like cutting;
- Risk-taking behaviours – "I'll try anything, I'm not afraid to die";
- Making funeral arrangements;
- Giving things away (clothes, expensive gifts) – "When I'm gone, I want you to have this";
- Substance abuse;
- Feeling like a burden to others – "You'd be better off without me";
- Talking about suicide – "Sometimes I feel like I just want to die".[lxvi]

93 There are also many people who experience forms of psychological distress that may serve as early warning signs of suicidality. Intervening early with the right support can help these people before they escalate into crisis.

94 Beyond Blue is advocating with many others for a universal system for suicide prevention so all people, at any time or in any place, can get the support they need when they are feeling suicidal. Such a system should take a social determinants approach, recognising that suicidality is influenced by communities, relationships and a range of socio-economic factors. The system should target a variety of positions on the continuum of suicidality, supporting, for example:

- **everyone in the community to have the skills and confidence to know the warning signs of suicide and to have active, safe conversations with people who are at risk of suicide.**[lxvii] The evidence to support direct conversations about suicide by the general community can be found in a national research study, which found everyday Australians want to help family and friends at risk of suicide, but are unsure how to identify and respond to the warning signs.[lxviii]

  The research was commissioned by Beyond Blue and conducted by the University of Melbourne and Whereto Research Based Consulting, with the aim of understanding what advice can be given to the public to increase the likelihood

that they will ask about and support someone who may be at risk of suicide to stay safe and get the help they need. The research also involved people with recent experience of suicide and suicidal behaviour, who said that they want others to listen to them and show they care. The findings confirm vital information about public perceptions of suicide and people's ability or willingness to respond to suicide risk. The findings and recommendations provide a clear indication of what is useful, what is not and address some common myths that still exist around suicide and suicide prevention.

As a first step to respond to the research, in late 2018 several sector organisations collaborated to self-fund a national social media campaign, #YouCanTalk.[lxix] The campaign tackled some of the myths about talking openly and directly about suicide and gave the public some practical tips about how to initiate such a conversation with someone they may be worried about, including what to say and what not to say, and how to respond.[lxx] The collaboration is continuing, with plans for another burst of activity later in the year. Importantly, any person or organisation can use the hashtag to promote healthy conversations to prevent suicide.

- **people in pre-suicidal distress, with brief, low intensity interventions to address early signs of distress** that can be accessed through self-referral (e.g. helplines, online peer forums, online therapies) or referral by community gatekeepers (e.g. GPs, nurses, community workers and first responders).

  The Scottish Government is piloting a Distress Brief Intervention program in four sites. The intervention is a time-limited and supportive problem-solving contact with an individual in distress. It involves a two-level approach. At level 1, a person presenting in distress to accident and emergency, Police Scotland, Scottish Ambulance Services and primary care, is offered a compassionate interaction and a referral into Level 2. At level 2, the person is contacted within 24 hours of referral and provided with compassionate community-based support, including problem solving, wellness and distress management planning, and signposting, for up to 14 days.

- **people experiencing suicidal ideation to stay safe, in appropriate places in the community**. Thoughts of suicide and suicidal crises are often temporal. Easy to access, personalised safety plans (for instance, the BeyondNow app[lxxi]) can be made and used by people when they are feeling unsafe or suicidal. While everyone's plan will be unique to them, the process and structure are the same – it prompts the person to work through the steps until they feel safe. We also need to scale up alternatives to clinical and emergency department settings, which often escalate and intensify suicidal feelings: we need 'safe spaces' in local

communities with support from family, friends, peer workers and others. Examples include:

- Drop-in style 'safe haven' cafés where someone in distress can receive comfort, de-escalation assistance and advice from a peer worker. Examples are the highly successful cafe in Aldershot, North East Hampshire[lxxiii] and the new Safe Haven Café at St. Vincent's Hospital in Melbourne.[lxxiii] An economic evaluation by PwC found that the St Vincent's café saved the hospital $225,400 in avoided admissions to the Emergency Department (ED) and has significantly improved the outcomes for people living with mental illness in the community.
- Residential homes staffed by peer workers alongside clinicians. The Maytree Suicide Respite Centre in North London is a residential sanctuary offering free 4-night/5-day residential stays for people in suicidal crisis.[lxxiv] An evaluation revealed positive qualitative and quantitative results after three years of operation. Guests showed a statistically significant reduction in problems and risks on exit, and the majority of ex-guests surveyed had improved from 'clinical' to 'normal' within three months.[lxxv]
- Coordinated respite centres. Crisis.Now is a diversional program run in Arizona, US that comprises short-term, sub-acute residential crisis programs, a centralised call centre to triage calls from people, and a 24/7 mobile crisis team that collect people and bring them to the centres. Early results indicate Crisis.Now saved $37 million in ED costs, reduced psychiatric waiting times by a cumulative 45 years, and diverted an equivalent of 37 full-time equivalent police officers away from conveying people to hospital.[lxxvi]

- **people who have attempted suicide, with assertive aftercare.** For instance, Beyond Blue's The Way Back Support Service which provides non-clinical support in the first three months following discharge from hospital for a suicide attempt or suicidal crisis.[lxxvii]

What needs to be done to better address determinants of mental illness, and assist in early intervention and detection?

95 Beyond Blue recently made a submission on this subject to the Productivity Commission Inquiry into the economic impacts of mental ill-health and we are currently preparing a similar paper to submit to this Royal Commission.

96 Both Commission processes have the potential to bring about genuine reform via policy decisions that take a social determinants approach and plan long-term investments for, and measurement of, integrated and person-centred responses to improve the mental health of Australians and prevent suicide. The coinciding of the inquiries allows an unprecedented and unique chance to coordinate and co-design this planning, investment and decision-making by the Commonwealth and Victorian governments. This is an opportunity to resolve and clarify respective roles and responsibilities and showcase how national and state systems can work together beyond election cycles. Several examples of what this could look like are provided below.

97 Mental health conditions such as anxiety and depression should be prevented from the early years by developing a system to support the mental health of every child and their family. Victoria already has parts of a system infrastructure in place, from perinatal to maternal and child health services, immunisation, early childhood and primary education. These systems rightly reflect the importance of childhood physical and educational development. However, they do not currently place an equal emphasis on monitoring or supporting children's social and emotional development.

98 Parents, carers and professionals involved in children's lives should be equipped with the knowledge and tools to identify emerging behavioural and psychological issues – and the pathways to more specialist supports and services – just as they do with physical health. These approaches should be universal and targeted, to ensure those families and children who would most benefit get focused support. When problems are identified in children's emotional wellbeing, access to relevant services and supports is currently mixed. Evidence-based supports should be available across the state and accessible without cost or geography acting as barriers.

99 In education settings, the Commonwealth-funded Be You initiative is showing how we can take the learnings from evidence-based approaches and scale them up nationally. This universal approach could be enhanced in Victoria with complementary, targeted investments in children and youth services and psychological services for the education workforce. National and state data should be linked and shared to measure progress and outcomes.

100 Mental health conditions such as anxiety and depression should be prevented in workplaces by supporting the Commonwealth-funded National Workplace Initiative to encourage mentally healthy workplaces. State Governments are also doing a lot to encourage and facilitate healthy and mentally healthy workplaces. The Victorian Government could commit to work with the Commonwealth to integrate its own activities with the national initiative.

101 While recent positive progress has been made, there is also much still to do to ensure that state-based WorkCover schemes take mental health into full account and state workforces, including police and emergency services, operate in environments that promote and sustain mental health.[lxxviii]

102 We need to put the missing steps in stepped-care by building an early intervention system of low intensity, non-clinical mental health supports and building the peer workforce. While much of the implementation of the stepped-care model relies on PHNs, the Victorian Government should be working collaboratively to identify and respond to service gaps, such as those created by the introduction of the NDIS[lxxix] and to employ more and create career pathways for peer workers. Pooled funding at a regional level would enable joint planning, commissioning and measurement.

103 The suicide toll can be reduced by building a system of universal support for everyone in suicidal crisis or distress. Beyond Blue has been working with the Victorian Government to realise the complementary benefits of the Hospital Outreach Post-suicidal Engagement (HOPE) initiative with the national rollout of The Way Back support service. However, there is much more that can and should be done at earlier stages of suicidality. As the recent Beyond the Emergency report[lxxx] has shown, there are significant demands on paramedics who attend people in suicidal distress but very few options other than taking them to an Emergency Department. A wider set of responses, such as those detailed above (paragraph 94), should be pursued to reduce Victoria's suicide toll.

104 Pursuing greater equity and inclusion by supporting the self-determination and efficacy of population groups who continue to experience poorer social and emotional wellbeing and higher risk of suicide should be a priority. These groups include Aboriginal and Torres Strait Islander peoples, LGBTI communities, people affected by trauma, and people from regional and rural Victoria. This should take a whole of life, whole of government approach and include prioritising safe and affordable housing as foundational for good mental health. The Productivity Commission has also identified interaction with the justice system, which includes courts, prisons and the systems and processes that lead people in, through and out of these institutions, as having a significant impact on mental health, as well as having disproportionate representation by people with mental health conditions.[lxxxi]

105 Victoria has taken some positive steps towards Aboriginal self-determination, including the transfer of housing and out-of-home care responsibilities to Aboriginal-controlled organisations, and the introduction of a process to explore treaties with Aboriginal groups across the state. However, there is still much that needs to be done to close the gaps in Aboriginal social and emotional wellbeing and I am sure the Royal Commission will hear evidence as to the solutions from Aboriginal and Torres Strait Islander people.

106 People who live with disadvantage typically experience mental ill-health at rates two to three times that of their more advantaged counterparts, yet often access support at rates two to three times lower.[lxxxii] Without concerted, long-term and bipartisan action – and addressing broader social determinants and equity – people with the greatest needs will continue to miss out.

107 Over recent decades, there have been many consistent themes in the analysis of our country's challenges with mental health and the solutions that could fix them. These include:

- Collecting and linking the right data (across jurisdictions, regularly and in as real time as possible), analysing patterns and trends, and linking service funding to levels of demand and outcomes. The National Survey of Mental Health and Wellbeing[lxxxiii] provides rich and reliable population data on Australia's mental health but has not been conducted since 2007. The national Better Access scheme has greatly increased the utilisation of mental health plans and psychological therapies through Medicare subsidies but has not systematically gathered the outcome data that would demonstrate its impact and is not linked to state-funded services data. While we do have data around hospital admissions, this limits our focus to moments of crisis and does not connect with interventions before or after admission. Furthermore, mental health supports in other systems, such as prisons or homelessness services, do not contribute to a shared data set, so we have very limited understanding of individual trajectories or crossover points.
- There appears to be a reluctance to set measurable outcome measures and long-term targets to which governments and providers could be held accountable. The Fifth National Mental Health and Suicide Prevention Plan, for instance, lists 24 indicators that could help to measure Australia's progress but stops short of aligning these indicators to specific targets. Getting the right data requires widespread agreement on the tools for data collection and having the systems in place that allow the result sets to be linked and shared for analysis.
- Responding to the real-life experiences and needs of people and families affected by mental ill health and suicide. This means the genuine inclusion of consumers and carers in governance and decision-making, co-design, implementation and evaluation of services and supports.
- Psychosocial models and supports in the community – delivered by a range of workforces – need to be valued more and be integrated with traditional bio-medical models and services. In 2016-17, 6.45 million people received either mental health related prescriptions or Medicare-subsidised clinical mental health services. Only 420,000 people or 6.5 per cent of this number accessed

community mental health services.[lxxiv] A key finding of the 2014 National Review of Mental Health Programmes and Services by the National Mental Health Commission was the need to shift funding and resources from costly 'downstream' programs (ED presentations, acute admissions, avoidable readmissions) towards 'upstream' services (population health, prevention, early intervention, recovery and participation).[lxxv] We need the deep and specialised expertise of clinical services when our mental health demands it but we are all better off if we never get to that point in the first place. Psychosocial models address both psychological and social aspects of behaviour and mental health. Psychosocial supports look at the whole person and their needs and invest in their wellbeing, often focussing on those vital social determinants of health that can contribute positively or negatively to the development of further crises.

- New workforces need to be developed, scaled up and supported. This includes the peer workforce.
- Matching investment and service responses to individual and community needs. The stepped-care model takes us in the right direction to more personalised care, though ultimately still ends up with quite broad categories of both assessment and treatment options. We need a system that offers "the right care in the right place at the right time" but too often our existing approach fails to deliver on all three counts.
- The greatest gains come from investing early, which applies to both age and the development of symptoms. We should be thinking more broadly across children's health and development to routinely check on emotional wellbeing in the same way that we do for physical wellbeing. Our children go through standard processes and a series of measurements across their early years that could be augmented to include emotional wellbeing as an expected milestone. Where concerns are identified through this process, tailored support that takes into account the individual child and family circumstances should be made easily available and widely accessible.
- Many people experience mental health and ill-health in cycles or episodes that, with the right preventative and early intervention planning and supports, can be proactively managed and the effects mitigated. With the right, personalised package of supports and opportunities to participate, people who live with severe and enduring mental ill health can function well and contribute significantly to their communities and the economy. This relies on interventions that minimise the impact on functioning of mental illness and facilitate recovery. Where mental health issues are episodic, a different approach to 'early intervention' is required because the pathway is non-linear.

What do you consider are the most significant challenges facing the mental health system in preventing mental illness and intervening early?

108 The first challenge is lack of long-term, inter- and intra-government design and planning and lack of clarity of roles and responsibilities. This is exacerbated in times of fiscal constraint and by electoral cycles. We need a commitment to long-term structural change of financing, service design, workforces and measurement if we are to realise longstanding national policy commitments: a comprehensive, a long-term bipartisan, multilevel strategy and implementation plan that has clear goals and is resourced to achieve them. While most investment continues to be tied up in comparatively expensive, tertiary, clinical services, it is incredibly difficult to "shift the pendulum" (as the National Mental Health Commission's review recommended in 2014) and rebalance investment over time to resource preventive and early intervention strategies.

109 Too often there is an 'either/or' argument made when it comes to investment decisions, which likely reflects the relative underinvestment in mental health and suicide prevention relative to the burden of disease or years of life lost. This, combined with a sector that at times is unable to reach consensus or specificity, contributes to a pattern of short-term thinking, disaggregated programmatic investments and pilots. For example, arguments are increasingly made that we need to reduce awareness activities to invest in more specialised acute and community-based services. These choices should not be binary. We need balanced investment in all parts of the continuum and by all levels of government to build a true system. We cannot be complacent about the gains we have made in literacy. We still have a long way to go in the reduction of stigma and elimination of discrimination: mental health issues begin long before a person enters any mental health system – in communities, homes, childcare, education and workplaces.

110 We also need a balanced portfolio of services and supports that match people's needs – right care, right time, right place – a continuum of responses that provides more personalised (and therefore more effective) support and treatment than the disconnected and sometimes limited number of options most people and professionals at the front line have today. For example, ambulance service data from six States and Territories, including Victoria, shows that the hospital data we have on men's mental health crises, suicidality and self-harm is just a fraction of the number that generate ambulance attendances.[lxxxvi] Currently paramedics have few choices but to transport people to hospital EDs, which are environments that often elevate psychological and suicidal distress.

111 Of the 30,000 men who had an ambulance attend to them in a year, 42 per cent had more than one ambulance attendances; over seven per cent had called an ambulance ten times or more. This study confirms that we need different thinking and better options for people

in crisis, and for police and paramedics, to stop the revolving door of mental health and suicide crisis presentations to EDs.

112 If these people do not have life-threatening injuries, they are better served in alternative 'safe spaces' in the community, such as The Haven in Melbourne. These safe spaces provide an alternative, calm environment, in the community or sometimes onsite with hospitals and other health services, staffed with people trained to deal with these issues and who have the time it takes to support people in crisis. They are usually peer led.

What key changes to the mental health system do you consider would bring about lasting improvements to Victoria's ability to prevent mental illness and intervene early?

113 Reducing stigma, especially now self-stigma, and discrimination continue to be critical to moving forward. We need to keep changing the conversation about mental health and suicide prevention, building understanding and confidence so that individuals, families and communities know how to care for and protect themselves – and, when issues do arise, people are not ashamed to seek help.

114 The stepped-care model is important because it helps us to see across the mental health continuum, to recognise gaps and to design and deliver interventions that are more appropriate to each person's individual situation. At the moment, we are too limited by the most common solutions at hand (medication, psychological services funded through Medicare and State-run specialist and acute services) so our responses frequently do not match the nuance of people's needs. While there are good and evidence-based solutions outside of this, they do not exist at the scale needed to meet people at their point of need.

115 In addition to the points made above about joined up, long-term planning by all governments, investment in more community-based services and supports (from peer led safe spaces to sub-acute step up and step-down options) will help to fill out the "missing middle" between primary care and acute care.

116 The contemporaneous Productivity Commission Inquiry presents an excellent opportunity for the Royal Commission to make complementary recommendations that build towards a truly integrated and planned system.

sign here ▸ _____

print name Georgina Harman

date 01/07/2019

Royal Commission into
Victoria's Mental Health System

ATTACHMENT GH-1

This is the attachment marked 'GH-1' referred to in the witness statement of Georgina Harman dated 1 July 2019.

About Beyond Blue

Please describe what Beyond Blue is and what its aims are.

Beyond Blue is an independent, not-for-profit organisation that works to support everyone in Australia achieve their best possible mental health and prevent suicide. We do this by promoting good mental health; preventing the onset of mental ill health; providing services, programs, resources and tools that support people to recover from and manage mental health conditions and prevent suicide; and through incubating new models using new workforces, research and advocacy. We have a particular focus on the most prevalent mental health conditions, anxiety and depression, as well as preventing suicide. Around one million people in Australia experience depression and two million experience an anxiety condition each year. Eight Australians die by suicide and an estimated 200+ people attempt suicide each day.

We believe that the biggest changes will be made by addressing mental health positively, proactively and as early as possible, so we prioritise health promotion, prevention and early intervention. We want those who live with mental health conditions to be able to live well and to have opportunities to contribute as valued members of their communities. This may mean better access to treatment and support, but it also includes reducing stigma, prejudice and discrimination. We collaborate with people who have personal experience of mental health issues and suicide to change the conversation, tackle stigma and discrimination, identify our priorities and design and evaluate what we do.

We want people at all levels of suicidality to know that they have support, and that there is hope for a better future.

(a) What is Beyond Blue's role in the mental health system?

As a national organisation, Beyond Blue's core functions are mental health promotion, prevention and early intervention where people live, learn, work and play. We also pilot and help to scale up new service and support models that meet people's needs and fill service gaps.

With over 85 per cent of Australians knowing about Beyond Blue, each year millions of people, families, workplaces, education institutions and community groups come to us seeking advice, information, support and guidance.

Finally, we engage in research, policy development and advocacy so that Australia's major structures and systems reflect the best possible knowledge, evidence and expertise.

Beyond Blue's major activities are outlined below.

Six priority areas for strategic impact: Beyond Blue delivers a suite of integrated initiatives across six areas that we believe are essential to improving Australia's mental health and preventing suicide.

Impact area	Major initiatives
1. Prevention and early intervention where people live, work and learn	• **Healthy Families:** providing practical resources to build children's resilience and support mentally healthy parents and carers. 380,000 unique website visitors in 2017/18 with 80% reporting greater involvement in their child's life. • **Heads Up:** facilitating the adoption of workplace mental health strategies in organisations across Australia; lifting resilience, recovery and productivity. 430,000 website visits in 2017/18. • **Be You:** Australia's national education initiative, supporting educators to change the mental health trajectory of children and young people. In five months since launch, 52,000+ individual learning accounts created; 2,200+ early learning services and 4,100+ schools signed up.
2. New service innovation to support reform of the mental health system	• **NewAccess:** coaching people with mild-to-moderate depression and anxiety from 22 sites; delivering a recovery rate of 70 per cent and a cost-benefit of 1.5. • **The Way Back:** supporting people after a suicide attempt with one-on-one, non-clinical, practical support in the community. 8 sites, 3,000+ referrals to date, expanding to 25 sites nationally. • **BeyondNow:** An app for people to develop a suicide safety plan they work through when experiencing suicidal thoughts. Since 2016 25,500 plans have been completed.
3. Changing the conversation - mental health literacy, stigma & discrimination	• **Campaigns:** e.g. 'Know When Anxiety is Talking' to help people to recognise and take action on anxiety conditions and 'The Invisible Discriminator' highlighting the impact of racism on the social and emotional wellbeing of Aboriginal and Torres Strait Islander people. • **Traditional and social media:** Beyond Blue reaches millions of Australians daily through our newsroom contacts, media releases and opinion pieces. Over 760,000 followers on social media.
4. Supporting people in need	• **Beyond Blue Support Service:** In 2017/18 helping nearly 170,000 people with free advice, immediate counselling and referral by mental health professionals. 95% per cent of people are first time users. 2018 independent evaluation looked at the immediate and short-term (one month) impacts of a single session of psychological support and referral and found: users reported reduced distress and increased coping ability, acted on the advice provided by counsellors and were satisfied with the service. There were statistically significant reductions in distress (decrease of 42% from pre- to post-contact) and improvements in ability to cope (increase of 32% from pre- to post-contact). Improvements were maintained at one month after receiving the service. Most took action to improve their mental health, with 76% acting within 3 days of contacting the service and 85% within 1 month of contact. • **Online peer-to-peer forums:** helping over 1.2 million people a year seek advice and support from others with similar experiences with measurable positive outcomes on symptoms and behaviours. One in four users visiting the forums are actively seeking help for suicidal thoughts or self-harm. A 2017 review found that

Impact area	Major initiatives
	54% of users said that they felt less depressed, 56% said that they felt less anxious, after interacting with the forums. • **Beyond Blue website:** helping almost 12 million people a year with information and tools to recognise and recover from depression, anxiety and suicidal thoughts.
5. Policy advocacy and research to drive system change	• **Policy advocacy:** delivering policy thinking and advice through expert analysis, strategic insights and collaboration with key stakeholders. • **Research:** Since 2002, Beyond Blue has invested $70 million in research to identify and disseminate best practice.
6. Partnering with people affected by anxiety, depression and/or suicidality	• **blueVoices:** an online reference group of more than 8,300 people who provide expert insights that inform all aspects of Beyond Blue's work. • **Speakers and Ambassadors:** 30 high profile Ambassadors and 240 Speakers undertake 900 national engagements a year, lifting mental health literacy and helping to eliminate stigma.

1. **Who does it serve?**

Beyond Blue serves the Australian community. We are independent and strongly bi-partisan. We see ourselves as supporting the mental health needs of all people in Australia, and preventing suicide, both today and for generations to come.

2. **How is it funded?**

Beyond Blue receives core funding support from the Commonwealth Government and every state and territory government in Australia. We also receive financial support, donations and in-kind support from numerous individuals, philanthropy and corporates.

While the majority of Beyond Blue's overall funding is from governments, most of this is tied to time limited projects where we are involved in national scaling of new service models.

Core funding from the Commonwealth, State and Territory Governments makes up just over a third (35 per cent) of Beyond Blue's annual revenue. Just under 40 per cent is linked to specific, time-limited projects (Be You, The Way Back Support Service) and 25 per cent comes from fundraising and other community sources.

Beyond Blue's 24/7 Support Service is funded entirely by donations from the community and other non-government entities.

A breakdown of forecasted revenue for 2018/19 is provided below.

Funding Source	Amount ($M)
Core funding Commonwealth	16.9 (27%)
Core funding States/Territories	5.2 (8%)
Cwth time limited special purpose grant for national initiative: Be You in schools and early learning services	22.5 (36%)
Cwth time limited special purpose grant for national initiative: The Way Back Support Service expansion	2.1 (3%)
Fundraising	11.2 (18%)
Partnerships	0.9 (2%)
Other	2.2 (4%)
Interest	1.5 (2%)
Total	**62.5 (100%)**

N.B. Above numbers do not include value of pro-bono contributions to Beyond Blue

3. How does it fit with other parts of the mental health system?

There is a frequent criticism that we do not really have a 'mental health system'. Instead, we have a series of fragmented services that do not align well with either the prevalence, distribution or severity of Australia's mental health data and people's experiences and are overly focussed on high cost tertiary and crisis services.

Beyond Blue is focussed on big picture, structural and behaviour change; trialling and scaling up innovative new models and workforces in the settings where people live their lives; and preventing onset of mental illness and encouraging people to connect and to seek support early. We play a major role in increasing mental health and suicide prevention literacy; reducing structural and interpersonal stigma and discrimination; supporting workplaces and education settings to become mentally healthy communities; and often signpost or refer people to support for the first time.

We know that too many people seek support and/or treatment when their mental health has already deteriorated because the services and supports they needed in the community were not there earlier. We also know that people on the path to recovery need support to help them maintain their best possible health and lives. Yet this too is frequently experienced as a major hole in the current 'system'. The insights, experiences and solutions offered by people and families who have personal experiences of mental ill health, suicidality and suicide are too often not the starting point of design, implementation and evaluation. The systems that currently exist are not integrated with one another or with the person's needs and are largely designed to help people after their problems have deteriorated. We

need great acute, crisis and emergency services but we should also be investing much more into helping people to stay healthy and well in the community.

The system we need is one that is built around promoting and facilitating positive mental health and supporting prevention, early intervention and recovery in the community, linked to clinical interventions in acute and hospital settings where appropriate.

That is why – while continuing our work to raise awareness, educate and tackle stigma and discrimination – in recent years Beyond Blue has invested effort and resources in researching, piloting, proving up and scaling or divesting to others new community-based psychosocial models that predominately use new workforces and tools that harness technology. Four examples are provided below.

1. **The Way Back Support Service**[lxxxvii] (The Way Back) is a new suicide prevention program targeting people discharged from hospital after trying to take their own lives. It delivers one-on-one, non-clinical care and practical support that people can relate to following a suicide attempt so they do not disengage with services they may require. Support Coordinators deliver the service to help people stay safe and connected with their support networks and existing health and community services during a period of high risk and vulnerability. Currently eight sites are operating in Australia. Since 2014, collectively the sites have received nearly 3,000 referrals. Up to 25 sites will be operating over the next three years thanks to a 2018 federal Budget commitment and co-contributions from participating States and Territories.

   The Way Back is delivered to people who have been admitted to a hospital following a suicide attempt or people experiencing a suicide crisis. Partnering hospitals assess and refer people to The Way Back Support Coordinators who then contact the person within 24 hours and work with them to develop a safety plan. The plan includes setting goals tailored to the individual which encourages them to re-engage safely in everyday life. It also reduces barriers to accessing follow-up care and tracks appointments with health and other social support services. Support Coordinators keep in touch with people regularly, either face to face, by phone and/or email. The level of support provided is based on the needs and wishes of the individual and can vary from a one-off contact providing essential information, to multiple contacts for up to three months. The Way Back is underpinned by robust clinical

governance structures to ensure safe management and risk escalation of its clients.

2. **NewAccess**[lxxxvii] is an early intervention, low intensity program designed by Beyond Blue to provide easily accessible, free and quality services for people with mild to moderate symptoms of depression and/or anxiety who are not currently accessing mental health services. It meets people at their point of need before they deteriorate to the point that requires clinical intervention.

   The model was trialled by Beyond Blue from 2013 - 2016 and is now being commissioned by a growing number of Primary Health Networks, delivered by local providers with Beyond Blue providing oversight and quality assurance. The program includes an assessment, five subsequent sessions and a review. At the first appointment a NewAccess Coach will complete an initial assessment with the person and develop a program to their individual needs. NewAccess Coaches are specifically trained in low intensity approaches to help guide people through their tailored plan. Coaches can also assist individuals to connect to other support such as employment, financial, education and housing agencies.

   NewAccess is designed to overcome many of the barriers we know exist to people seeking help: it does not require a referral by a GP or other health professional; it is free; it uses non-stigmatising language and approaches ("work stress or uncertainty, change in living arrangements, new parent worries, family problems, health concerns or uncertainty, long-term isolation or loneliness, financial worries"); and can be delivered over the phone, by Skype or in person.

   Importantly, recovery outcomes are visible in real time to the person, coach, clinical supervisor and funder using a range of clinical and wellbeing measures at every point of contact. Recovery rates were 67.5 per cent during the trial period and have since increased to an average of 70 per cent in the 17 current service sites.

   An independent evaluation in December 2015 showed NewAccess:

   - is both clinically successful and economically viable;
   - appeals to Australians – for every person to make an initial appointment, 88 per cent proceed to treatment and 72 per cent continue treatment to completion.

- overcomes stigma – free entry, no medical referral, either face-to-face or over the phone sessions, no labelling and practical exercises attract those who do not traditionally seek help.

3. **Beyond Blue Connect** is a free peer support service that puts people aged 16+ who live, work or study in Victoria's Greater Dandenong community, in touch with mentors. It is particularly designed for culturally and linguistically diverse communities. Peer support occurs when someone provides support to another person with whom they share similar experiences. This may include modelling hope and recovery, sharing knowledge and experience, and providing emotional, social or practical help. Mentors have had a range of training and experience in health, community and peer support services. They receive ongoing training and supervision.

   People who access the service are supported to enhance their skills in a range of areas including stress management and relaxation, goal setting, decision making and problem solving, self-care, keeping physically healthy, building supportive relationships, and navigating health and community services.

   Following a successful trial and positive independent evaluation, Beyond Blue has now stepped back and divested the service model to the Primary Health Network and local service provider.

4. **Beyond Now**, an easy-to-use suicide safety planning app for smartphones that provides a convenient way for people to develop a personalised safety plan. Since it was launched in 2016, 25,500 safety plans have been made.

   Every day, around eight Australians die by suicide; more than 200 people attempt suicide and many more are thinking about suicide, with many having made a plan. Often, when someone is thinking about suicide, it is not so much that they want to die – but that they want their pain to stop – and there is a part of them that still wants to live, if only life was not so hard. It can be helpful to have a safety plan for how to get through these times, to refer to and remind themselves of reasons to live, family and friends they can talk to, ideas of activities to do when they are alone to aid when they are vulnerable. While everyone's plan will be unique to them, the process and structure are the same – it prompts a person to work through the steps until they feel safe.

> The app makes creating and using a safety plan easy by guiding someone through the steps one-by-one, offering suggestions for each step. It can be updated or edited anytime and offers the option of sharing it with support people and health professionals. We encourage people to work with a health professional or support person to create their plan.

Of course, Beyond Blue works within the systems and networks that currently exist. Those are the present places, people, services and infrastructures from which the transformation that we are looking for needs to build upon and include. We work collaboratively with all Australian governments, Primary Health Networks, Mental Health Commissions, peak bodies and service providers. We also work extensively outside the mental health sector and system in education, workplaces and communities.

Beyond Blue is a member organisation of Mental Health Australia and Suicide Prevention Australia. We are a founding member of the Mentally Healthy Workplace Alliance. We partner in service delivery with a range of other organisations, including Early Childhood Australia, headspace, Medibank Health Solutions, Primary Health Networks and numerous local NGO service providers. We also have many research, philanthropic and corporate partners.

Who are its clients?

Beyond Blue's services, programs, resources and tools are used by people from communities right across the country. Each year around 12 million people visit our websites. Our Online Forum community provides a safe, anonymous space for over 1.2 million people per year to talk about their mental health and get support from a community of peers, online moderators and some clinical support from a mental health nurse. In 2018/19 we estimate there will be nearly 200,000 contacts with the Beyond Blue Support Service.

Be You, the Commonwealth-funded National Mental Health in Education Initiative is equipping Australian early learning services and schools with the skills and strategies they need to ensure that every child, young person and staff member can achieve their best possible mental health. Since its launch in November 2018, nationally more than 54,000 educators have created individual learning accounts (almost 20,000 individuals have registered from Victoria) and 2,249 early learning services (459 in Victoria) and 4,180 schools (1,037 in Victoria) have registered to become Be You learning communities.

The Way Back Support Service is a non-clinical follow-up service for people who have attempted suicide or are in suicidal crisis. The Way Back is operational in eight sites around Australia, including in the Australian Capital Territory, New South Wales, Queensland and Victoria. Nearly 3,000 referrals have been received in five years of

operation. Beyond Blue is working with a range or partners to expand the service to at least 25 sites across Australia.

The Way Back service sites

1. Hunter: Movember, Beyond Blue, NSW Government
2. Canberra: ACT Government
3. Geelong: Victorian Government under the HOPE initiative
4. Wagga Wagga, Deniliquin, Griffith, Young: Murrumbidgee PHN
5. Redcliffe: Brisbane North PHN
6. Department of Veterans' Affairs in Brisbane
7. Lismore, Tweed Heads: North Coast NSW PHN
8. Casey: South Eastern Melbourne PHN

There are also 17 NewAccess services providing low-intensity Cognitive Behavioural Therapy coaching to people with mild and moderate mental health issues around Australia. Some of these services operate across multiple locations, in regions populated by over 7.2 million Australians in New South Wales, Queensland and Victoria.

NewAccess service sites

New South Wales

1. Central and Eastern Sydney PHN
2. Nepean Blue Mountains
3. South Western Sydney
4. Western NSW
5. Hunter New England and Central Coast
6. North Coast NSW
7. Murrumbidgee

Victoria

8. Gippsland

Queensland

9. Brisbane North
10. Brisbane South
11. Gold Coast
12. Darling Downs West Moreton
13. Western Queensland

In November 2018, we launched the second phase of the national anxiety campaign with the tagline 'what you're thinking isn't what they're thinking', which aims to reduce self-perceived stigma about anxiety. More than 700,000 people nationally visited the anxiety website, and 318,358 anxiety checklists were completed. A new phase of this campaign began in May 2019.

The BeyondNow suicide safety planning app has recently been upgraded with refreshed design, content and functionality as identified by consumer representatives and users of the app. More than 11,000 individual suicide safety plans were completed nationally in 2018, bringing the total since launch in 2016 to 25,500.

(b) What is Beyond Blue's role generally in research into mental health?

Since 2000, Beyond Blue has invested approximately $70 million across 300 mixed method research projects focused on depression, anxiety and suicide prevention.

Research underpins all Beyond Blue's work, reflecting our commitment to evidence-informed practice and continuous improvement. Beyond Blue is both a funder/commissioner of research, a partner in research and a translator of research evidence into policy, practice and behaviour change through our programs, services and communications.

Our current research strategy is shifting the focus away from support for individual research projects and towards support for larger programs of research on themes aligned to Beyond Blue's research priorities, which in addition to prevention of depression, anxiety and suicide, also include prevention of stigma and discrimination, and the strengthening of health and community services systems.

Royal Commission into
Victoria's Mental Health System

ATTACHMENT GH-2

This is the attachment marked 'GH-2' referred to in the witness statement of Georgina Harman dated 1 July 2019.

saxinstitute

Evidence Check

Depression and anxiety programs for children and young people

An **Evidence Check** rapid review brokered by the Sax Institute for Beyond Blue. December 2018.

Beyond Blue

An **Evidence Check** rapid review brokered by the Sax Institute for Beyond Blue.
December 2018

This report was prepared by:

Skvarc D, Varcoe J, Reavley N, Rowland B, Jorm A, Toumbourou JW

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Depression and anxiety programs for children and young people

An Evidence Check rapid review brokered by the Sax Institute for Beyond Blue.
December 2018

This report was prepared by Skvarc D, Varcoe J, Reavley N, Rowland B, Jorm A, Tsumbourou JW

Beyond Blue

Contents

Executive summary

Background

This document reported a systematic literature review of interventions (manualised programs and other services) that are implemented in childhood and adolescence with the aim of preventing anxiety and depression disorders and symptoms. The report was commissioned for Beyond Blue by the Sax Institute.

Review question

What programs or services for children and young people have been shown to be effective in the prevention of, and early intervention for, mild depression and anxiety?

Summary of methods

Evaluations of interventions implemented in the 0 to 18 age period were included based on rigourous randomised trial designs. Interventions were classified as: universal, where they are applied to an entire population; selective, where they target groups with elevated risk; and indicated, where they target individuals already showing signs or symptoms of anxiety or depression.[1] Early intervention encompasses both indicated preventive interventions and early case identification. [1]

In order to identify reviews of interventions with the primary aim of preventing mental health problems or promoting mental health, keyword and subject headings were searched on 1st October 2018 using online databases. The literature search identified 27 systematic reviews that were included in this overview.

A grey literature search was also completed within evidence-based program repositories to identify interventions that have been recommended for wider dissemination. Interventions were also identified from the included literature reviews.

Evidence grading

The AMSTAR 2 checklist was used to rate the quality of the 27 included systematic reviews: 8 were rated of high quality and 8 as moderate quality. A 'thumbs' rating system was also used to summarise the evidence for specific interventions, programs and services: 1 thumb up: There are at least 2 good studies showing evidence of effects. 2 thumbs up: 3 studies showing positive effects; 3 thumbs up: 4 or more evaluations showing positive effects.

Key findings

There is high-quality evidence of effectiveness for programs that prevent and intervene early in mild depression and anxiety in children and young people. The majority of the included reviews summarised evaluations examining school-based psychological interventions. Meta-analyses of these interventions revealed small significant post-intervention effects in preventing anxiety and depression. In some cases, effects persisted at follow-up.

Our search identified 11 manualised psychological interventions that met our inclusion criteria. In summary, seven psychological intervention programs were identified to have evaluation evidence according with a 2 or 3 thumb rating: Friends; the Penn Resiliency Program; the Coping with Stress Course; Promoting Alternative Thinking Strategies; Blues Program/ Blues Peer Group; CBT Bibliotherapy; and Interpersonal Psychotherapy Adolescents Skills Training. These programs are for the most part US based. A number of Australian manualised psychological interventions were included, however they had lower evidence ratings. Economic evaluations support school based psychological interventions, although the returns are lower than widely implemented health care interventions.

Six other programs were identified as having sufficient evidence to warrant a 2 or 3 thumb rating. These were: Coping Cat (👍👍👍); Families and Schools Together (👍👍); Physical activity interventions (👍👍); the Good Behaviour Game (👍👍); Mentoring (👍👍); and Online CBT (👍👍). All of these programs have been trialled in Australia. There are very positive economic evaluations for Coping Cat and the Good Behaviour Game.

Gaps in the evidence

We examined the settings and age groups in which interventions have been evaluated. We identified few interventions that have been evaluated in the pre-school age period. This may be an important age period to consider for future innovation in prevention programs.

To date, family-level interventions have had few evaluations. There is a need for increased innovation and evaluation to further trial family-level interventions, including in the pre-school setting.

Stirling et al [2] presented evidence that community-level factors related to insecurity and facing racial and other minority group discrimination make small but significant contributions to child and adolescent depression. Future program development and research should investigate community interventions to address these community-level risk factors.

A surprising finding was that the effects of bullying prevention programs on child internalising problems, anxiety and depression are unknown due to a lack of evaluation. Given that bullying prevention programs are theoretically linked to mental health benefits for both perpetrators and victims, future bullying prevention evaluations should investigate these effects.

The present review identified evaluations of physical activity interventions. However, there is evidence that other healthy lifestyle factors, such as good nutrition and sleep and avoiding substance misuse, may also contribute to adolescent mental health. [3, 4] Future program development and research should investigate the preventive benefits of child and adolescent healthy lifestyle interventions.

Our report identified a range of different types of interventions in varied age periods and settings. The range of interventions align with ecological theories arguing that multi-level factors contribute to child and adolescent anxiety and depression. Community-level interventions were identified that use coalition models to strategically integrate prevention services to address a range of risk and protective factors. At this stage there has been limited evaluation of the effects of these coalition models on child and adolescent internalising problems, anxiety or depression. Future program investment and evaluation should seek to establish whether community coalition models can offer a means of maximising prevention effects by improving the coordination of different interventions within settings.

The included reviews summarise a large number of randomised trials, the majority evaluating psychological interventions. Hetrick et al. [5] noted that few evaluations of the effects of psychological interventions have adopted active controls. Thus, evaluations completed to date cannot rule out the possibility that some of the changes seen in study participants may arise from being in the intervention arm of a trial or research study.

The review studies consistently identify heterogeneity of effects across psychological interventions. In some cases, heterogeneity is also evident when specific programs are evaluated (e.g. Penn Resiliency Program, FRIENDS, Interpersonal Psychotherapy). This suggests that future research is required to better understand the factors that explain variation in program outcomes (e.g. service delivery staff and setting, implementation fidelity monitoring). Variations in programs and implementation models should be competitively evaluated to distil critical components and superior models.

Although significant effects are evident for a number of programs at post-intervention, effects are typically smaller at follow-up. Future evaluations should investigate how to sustain longer-term intervention effects.

There is a need for further research to evaluate the most cost-effective approaches. In view of their potentially low cost, online universal programs may be a priority for further economic evaluation. There is an economic research gap in quantifying the long-term costs of depression and in providing ready access to pricing estimates of prevention programs for the Australian context.

Discussion of key findings

The most commonly evaluated strategy was universal psychological interventions implemented in primary and secondary school settings. There is consistent evidence for the efficacy of these interventions. It is noteworthy that many of the Australian school-based psychological intervention programs, have had less evaluation than the US based programs. As the Australian programs are similar in content to the US interventions, it seems reasonable that with further program development and evaluation in the Australian context, these programs should have the potential to consistently demonstrate effects.

In a number of cases, the Australian psychological intervention programs had weaker effects than their US counterparts. It is possible that the weaker effects may be partly related to differences in implementation models rather than program content. For example, a number of the Australian programs (Aussie Optimism, FRIENDS, Resourceful Adolescent Program) that were implemented by school staff had weak effects. To improve the evidence for Australian psychological interventions, future evaluations should competitively test the effects of different implementation models. For example, it may be feasible to test whether effects improve when psychologists, mental health staff and peer leaders implement programs.

The results of our review revealed that many of the intervention programs we identified tend to address one or two of the risk or protective processes that affect child and adolescent mental health. However, in order to achieve sustained prevention effects, it may be necessary to address multiple risk and protective processes. This evidence supports the implementation of a mixture of universal, selected and indicated prevention approaches within family, school and community settings. There is currently insufficient evidence to confidently identify whether universal, selected or indicated approaches are superior for the prevention of anxiety, depression or internalising problems. It is possible that the most effective approaches might involve a combination of intervention types being implemented within a school or community setting.

Recommendations

Based on the findings of this review, the following three recommendations were made:

1. That state and national authorities set aside funds to enable pilot studies to evaluate the effect of Australian school students receiving a minimum of one term of school-based psychological interventions in both late primary and early secondary school.
2. That Australian research agencies prioritise funds to support the evaluation of child and adolescent depression and anxiety prevention programs.
3. That in addition to school psychological interventions (Recommendation 1) funding be made available to evaluate the effect of a mixture of universal, selective and indicated prevention interventions being strategically implemented in different settings within health service regions.

Applicability

In summary, we evaluated the mixture of prevention interventions identified in this report to be applicable for implementation in Australia both in universal and targeted populations. Available evidence suggests that interventions to prevent anxiety, depression and internalising problems can be targeted to socioeconomically disadvantaged communities, and adapted for implementation in culturally and linguistically diverse communities. The available evidence also suggests that interventions can be successfully targeted to recruit youth in settings such as corrections institutions and health and mental health services.

Conclusion

A range of high quality systematic reviews were identified, and these studies demonstrated that prevention interventions have small but significant post-intervention effects in reducing anxiety, depression and internalising symptoms and disorders in children and adolescents. In total, 13 programs (7 school psychological interventions and 6 other programs [2 family, 2 school, and 2 community]) were identified with sufficient evidence to warrant a 2 or 3 thumb rating. The existing research is unable to detect consistent differences in effect sizes for universal, selective and indicated interventions. A number of gaps in knowledge were identified. We made three recommendations for disseminating prevention programs and for research to identify superior intervention models. Identifying models that can sustain effects over longer than 12-month follow-up periods is an important priority.

Background

Anxiety and depression are common mental disorders in Australian children and adolescents and contribute a considerable health burden.[6] This document reported a systematic literature review of interventions (manualised programs and other services) that are implemented in childhood and adolescence with the aim to prevent these mental disorders.

The report was commissioned for Beyond Blue by the Sax Institute as an Evidence Check review. Evidence Check reviews are designed to answer specific policy or program questions and are reported in a policy friendly format. The current review forms one of a series commissioned by Beyond Blue to support its policy reform agenda.

This literature review sought to identify:

- Programs and services that aim to prevent anxiety and depression and that have a strong evidence base for their effectiveness
- Other key programs or services that look promising but are not yet evaluated, where the evidence base is not yet known, or is not strong.

Prevention in developmental context

The substantial health, social and economic consequences of poor mental health emphasise the importance of using effective approaches to prevent disorders and promote mental health [7] Prevention refers to strategies or programs that avert or delay the onset, or severity of mental health problems.[1] Prevention responses were classified in the present report as: universal, where they are applied to an entire population; selective, where they target groups with elevated risk; and indicated, where they target individuals already showing signs or symptoms of anxiety or depression. Early intervention encompasses both indicated preventive interventions and early case identification.[1]

To identify prevention intervention opportunities, it is important to consider evidence of how depression and anxiety develop over the life course and what is known of the modifiable factors that contribute to these problems. In infants and young children, it is difficult to disentangle depression and anxiety and observers generally measure internalising symptoms (that combine observable anxious, fearful and sad behaviours). A large Australian longitudinal study [8] modelled parent reports of child internalising symptoms across eight study waves from age 3 to age 15 and identified 6 trajectories (sub-groups identifiable from common symptom patterns). These comprised: very low, low, moderate, high, decreasing, and increasing symptom pathways.

An analysis of parent and child-reported predictors [8] noted a number of factors that were theoretically implicated in the development of internalising trajectories. At the infant and toddler stage temperamental traits (inhibition/shyness, irritability) were early predictors for subsequent high or increasing internalising trajectories.[8] These findings accord with *neurobiological theories* of individual differences in child vulnerability to internalising that refer to influences that include biogenetic, parent and environmental factors.

Early child behaviour problems and parent-child relationship difficulties were also observed from the infant and toddler stage, as significant risk factors for subsequent high or increasing internalising trajectories. These findings accord with theories of *child-onset pathways* to emotional problems. Parent behaviour, family stress and mental health are known to influence child behaviour and relationship difficulties.[9-11]

Toxic stress risk process theories argue that stress and trauma experiences can impair neurobiological development early in the life course where children and young people have intense negative experiences (such as child maltreatment, peer bullying and family violence) that are maintained over time.[12] Toxic stress is a risk factor affecting cognitive and physical disability and child-onset mental health problems, including development of socio-emotional skills.[13-15]

Internalising problems, anxiety and depression are commonly observed to have different influences for girls compared to boys. Letcher et al. [8] noted the increasing pathway was much more common for girls and was influenced by *adolescent-onset risk processes*. Girls with temperamental reactivity and shyness who faced parenting and peer difficulties were more commonly on the increasing trajectories. For boys externalising problems were more prominent for the increasing trajectories.[8] These observations accord with *social development risk process theories* that argue that characteristics in peer and family social interactions influence child and adolescent pathways to depression. Anxiety triggers include actual and perceived threats of violence and trauma. Depression is known to be influenced by internalisation of actual and perceived social exclusion and negative social evaluation. *Cognitive risk process theories* emphasise thoughts as key drivers for emotional problems.

A follow-on study by Toumbourou et al.[16] noted that children high on parent-reported internalising symptoms had a greater probability of self-reporting high levels of depression symptoms in adolescence. Adolescent depression was observed to be influenced both by child-onset internalising problems, and by factors occurring in adolescence. These findings accord with life course theories that emphasise that adolescent emotional adjustment is influenced by childhood adjustment.

Toumbourou et al.[16] noted that adolescent depression was predicted both by child-onset internalising problems, but also by adolescent protective factors that included emotional competence and supportive parent and peer relationships (for girls). Letcher et al.[8] also reported that factors associated with recovery from elevated internalising symptoms included higher social competence, more positive parent and peer relations, and school adjustment. These findings accord with theories that *social emotional competence and social support act as protective processes* that assist in recovery from child and adolescent-onset emotional problems.

Using the same longitudinal dataset, Letcher et al.[17] completed a similar analysis of parent reported anxiety symptoms across 12 longitudinal study waves from age 4 months to age 17 years. Three anxiety symptom sub-groups were found, characterised by: low, moderate and high symptoms. The study found that there were important gender differences in high anxiety trajectories. For high anxiety boys (9% of boys), anxious and shy symptoms were observable by parents from age 5. The observation of child-onset pathways supports neurobiological theories that argue for individual differences in vulnerability to anxiety.

For girls, high anxiety trajectories were more common (15%) and showed elevations around puberty, with parenting and parent–child relationship factors more strongly associated with high anxiety in girls than boys. These findings support the operation of social development risk processes and social support protective processes in the emergence of anxiety through adolescence.

Shore et al. [18] conducted a systematic review and meta-analysis of longitudinal studies published between 2002 and 2015 that examined child and adolescent depression symptom trajectories. Twenty studies were included (n = 41,236) and depression symptom measures were harmonised to a common metric. A random pooled effects estimate identified 56% [95% CI 46 – 65%] of the sampled study populations on 'No or low' depressive symptom trajectories and 26% (CI 14 – 40%) on a 'Moderate' trajectory. 'High', 'Increasing', and 'Decreasing' depressive symptom subgroups were evident for 12% (CI 8 – 17%). Moderate symptoms were associated with poorer adjustment and outcomes relative to low symptom groups. 'High' or 'Increasing' trajectories were predominantly predicted by: female gender; low socioeconomic status; higher stress reactivity; conduct problems; substance misuse; and problems in peer and parental relationships. The

finding that substance misuse was associated with elevated trajectories is congruent with *lifestyle risk process theories* that emphasise health behaviour as an important component influencing emotional health.

The effect of peer relationships is congruent with *social development risk process theories*. Individuals with high depression symptoms are commonly found to cluster in peer settings such as school classrooms (e.g. Buttigieg et al., [19] Dishion and Tipsord [20] have argued that this is partly explained by peer contagion where "co-rumination" of pessimistic, critical and emotionally upsetting cognitions can contribute to emotional problems. Peer contagion influences are known to affect antisocial, suicidal and lifestyle risk behaviours and need to be monitored and managed in peer interventions and school and community settings.

The above findings, summarised from longitudinal studies, identify that there are different developmental settings (e.g. family, primary school, secondary school) that influence child internalising and child and adolescent anxiety and depression. In this report we use a settings approach to organise the existing evidence and to highlight gaps where there may be prevention opportunities.

Methods

Peer review literature

To identify reviews of interventions with the primary aim of preventing mental health problems or promoting mental health, keyword and subject headings were searched on 1st October 2018. We used EBSCOHost to search the following databases: Academic Search Complete, AMED - The Allied and Complementary Medicine Database, Applied Science & Technology Source, CINAHL Complete, E-Journals, Global Health, Health Policy Reference Center, Health Source - Consumer Edition, Health Source: Nursing/Academic Edition, MEDLINE Complete, PsycARTICLES, PsycEXTRA, Psychology and Behavioral Sciences Collection, PsycINFO, OpenDissertations.

To ensure the search was comprehensive, two search strategies were used. The following terms were included in the first search strategy: ((depress* OR anxi*) AND intervention* AND (community OR school-based OR universal) AND (adoles* OR youth OR child*)) AND (review OR meta*). The second search strategy used the terms: (("Mental health" OR "Mental health problem" OR "Mental wellbeing" OR "Emotional wellbeing")) AND ((Depressi* OR Affective OR Mood OR internal* OR anxie*)) AND (interventions or strategies or best practices). The following limits were applied for each strategy: Review articles; English language; published after January 2013; ages 18 years and younger. The reference lists of all the included studies were also scrutinised to identify any additional relevant studies. In addition, forward searches were also conducted for articles that cited included studies.

Interventions were organised to identify those that targeted universal, selected and indicated populations and early intervention opportunities.[1] Major intervention implementation settings were identified including family services, schools, and community settings including health and mental health services, corrections, and online services. Where possible we separated intervention outcomes for children aged 0 – 12 years (pre-school and primary school age) from those for young people aged 13 – 18 years (secondary school age). Outcome measures were organised to identify reductions in depression and or anxiety symptoms and disorders, and indicators of healthy functioning.

Evidence grading

We used the AMSTAR 2 checklist (https://amstar.ca/) to rate the quality of systematic reviews and meta-analyses. This checklist provides criteria to evaluate scientific quality based on 16 items that have high interrater reliability and validity).[21] The AMSTAR 2 provides criteria for assessing 'Yes' (full achievement with the qualities described) in each of the 16 items. For some items, definitions are also provided for 'Partial' achievement of qualities. Although the AMSTAR 2 is not formally scored, we assigned a numerical value of 1 for all items rated as a Yes and 0.5 for items rated as Partial.

Grey literature

We also conducted a concurrent search of grey literature. We formally searched Google Scholar. The following evidence-based program repositories were searched: Californian Evidence Based Clearinghouse for Child Welfare (CEBC: www.cebcdcw.org/program) under the headings Anxiety and Depression Treatment (Child & Adolescent); Washington State Institute for Public Policy (WSIPP: http://wsipp.wa.gov/BenefitCost?topicId=5); the What works for kids site, hosted by ARACY listed by Mental Health (http://whatworksforkids.org.au/programs); the online search facility available through the Substance Abuse and Mental Health Services Administration (SAMHSA: https://www.samhsa.gov/ebp-resource-center), using the search terms for "Mental health" and "Children and youth"; and previous what works resources completed for Beyond Blue.[22]

To rate the evidence for interventions we used the Thumbs rating that has been used previously in Beyond Blue 'what works' guides[22]:

👍	at least two good studies showing significant effects
👍👍	three studies showing significant effects
👍👍👍	four or more studies showing significant effects
👎	consistent evidence showing that the intervention does not work
?	not enough evidence to say whether or not the approach works

To be included in this review interventions had to have been evaluated via peer-reviewed literature.

A flowchart of the literature selection process is included as Appendix Figure A1. Search strategy one returned 37 peer reviewed literature review papers, while strategy two returned 465. The titles and abstracts identified from the two searches were combined. Manual scanning of titles and abstracts and elimination of duplicates yielded 25 papers that were identified for full text analysis. An additional 5 papers were identified through forward searching. After reading full texts, three papers were excluded[23-25] leaving 27 papers that were analysed using the AMSTAR 2 items.

Included studies

A summary table of the 27 papers that were analysed using AMSTAR 2 is presented as Appendix Table A1. Of the 27 reviews, 11 were rated as of low quality (AMSTAR 3.5 to 7.5). [26-36] The following,8 were rated as of moderate quality (AMSTAR 8 to 11) [37-44] and 8 were rated as of high quality (AMSTAR 11.5 to 15). [2, 5, 6, 45-49] We had senior authors complete a verification check on AMSTAR 2 ratings and all cited text for the 15% of review papers that we had most frequently cited. We found an 87% agreement in our AMSTAR 2 verification checks and no inaccuracies in the cited text and figures. The AMSTAR 2 inconsistencies did not change our categorisation of the papers we list above as high, moderate or low quality.

Program and service information was identified using two strategies. Firstly, the grey literature search identified interventions that had consistent evidence for effectiveness and in addition had been shown to be cost-effective.

Secondly, intervention details were identified from summaries and meta-analyses provided in the 27 literature reviews. As part of this process, intervention details were extracted from the evaluation study tables reported in the 27 included literature reviews. Across the 27 literature reviews, over 182 intervention evaluations were identified. Each of the evaluation studies was examined to identify: common names for the intervention programs; and effects on anxiety and depression. Where relevant this information was then added to the information gathered from the first two strategies.

To be included: interventions had to have documentation specifying how they were theoretically designed to prevent or address child and adolescent mental health problems; and one or more prior evaluations were required.

To judge the size of effects, we used Cohen's [50] criteria to determine small ($r < 0.30$, d or Hedges $g < 0.30$); medium ($r = 0.30$, d or Hedges $g = .50$); large ($r = 0.50$, d or Hedges $g = 0.80$); and very large ($r = 0.70$, d or Hedges $g = 1.30$) effect sizes. We evaluated effect sizes for relative risk ratios above 0.41 as small, from 0.40 to 0.25 as medium and below 0.25 as large. We evaluated Cox effect sizes under 0.28 as small, from 0.28 to 0.41 as medium and above 0.41 as large.

Conflict of Interest Management

In Appendix 2 we declare two intervention ratings where authors have involvement in the intervention management. Author Toumbourou has intellectual property responsibility for the management of the Resilient Families intervention. Authors Toumbourou and Reavley are Directors, and Rowland is the Chief Executive Officer of Communities That Care Ltd. We have managed these issues by non-conflicted authors verifying the statements we make regarding these interventions.

Findings

In what follows we present findings organised around developmental settings. In sourcing information, emphasis was given to the six reviews that received the highest AMSTAR rating. Additional details were then obtained from the lower-rated reviews and from the grey literature sources, where information was considered relevant.

In overview, there is evidence from rigorous evaluation studies that interventions have small, significant effects in preventing internalising, anxiety and depression in children and adolescents. The majority of the included reviews summarise evaluations examining school-based psychological interventions, however two reviews also summarise evidence for physical activity interventions. Both universal (school-based) and selective and indicated interventions in other settings have evidence for effects. Table 1 below presents an overview of findings for universal, selected and indicated programs organised within settings.

Table 1: Overview of evaluation evidence for programs organised within developmental settings

	Age Period		
Settings	**Pre school**	**Primary**	**Secondary**
Family	Home visiting[s,i] (👍) Triple P[u,s,i] (?) Exploring Together[s,i] (👍)	Triple P[u,s,i] (?) Exploring Together[s,i] (👍) Coping Cat[s,i] (👍👍👍) FAST (👍👍) Tuning in to Kids[u,s,i] (?) Strengthening Families[u,s,i] (👍)	Triple P[u,s,i] (?) Tuning in to Teens[u,s,i] (?) Resilient Families[u] (?)
School	Friends for Life[s,i] (👍👍)	Psychological interventions[u,s,i] (see text); Physical activity[u,s,i] (see text) Bullying Prevention[u] (?) Good Behaviour Game[u] (👍👍)	Psychological interventions[u,s,i] (see text) Physical activity[u,s,i] (see text)
Community	Communities for Children[s] (?)	Communities That Care[u] (?); Mentoring[s,i] (👍👍) Online CBT[u,s,i] (👍👍)	Communities That Care[u] (?) Mentoring[s,i] (👍👍) Online CBT[u,s,i] (👍👍)

NOTE:
👍 = positive effect in at least 2 evaluation trials
👍👍 = positive effects in 3 trials,
👍👍👍positive effects in 4 or more trials,
? = insufficient evidence to evaluate effects.
u = Universal intervention (targeting whole population)
s = Selective (targeting high risk groups)
i = Indicated intervention (targeting those with early symptoms).

Table 1 shows that there were no universal interventions identified in the pre-school period. Universal interventions become more common in the primary and secondary school age periods. A number of the

programs identified in Table 1 include universal, selective and indicated approaches. The information summarised in Table 1 is presented in more detail in the sections that follow.

Family setting

Eight prevention programs were identified that focussed service delivery on parents and families: Home visiting (👍); Triple P (?); Exploring Together (👍); Coping Cat (👍👍👍); FAST (👍👍); Tuning into Kids/ Teens (?); Strengthening Families (👍); and Resilient Families (?) All of these programs operate in Australia. One of these programs (Home visiting), focussed on vulnerable parents in the Pre-school period (prenatal and antenatal service delivery). The majority of programs (six) are delivered to Primary school students: Triple P (?); Exploring Together (👍); Coping Cat (👍👍👍); FAST (👍👍); Tuning into Kids (?); and Strengthening Families (👍). The Triple P (Positive Parenting Program) included variations suitable for parents with Pre-school, Primary and Secondary school children.

The evaluation evidence revealed small significant effects at post-intervention in reducing internalising (Home visiting, Exploring Together, FAST, Triple P, Strengthening Families) and depression symptoms (Resilient Families) and medium effects for anxiety symptoms (Coping Cat). **All of the effects were restricted to selective families and, hence at this point there is no evidence that family interventions can be used to achieve universal prevention effects.** A consistent finding was that effects were smaller at follow up assessments. For Triple P and Resilient Families evidence is limited to a single study. Information on the eight programs and their mental health impact is summarised in the sections that follow, and further details are provided in Appendix 2.

Family setting: pre-school period

Our search identified three family-level prevention programs implemented in the pre-school period: Family Home Visiting, Triple P and Exploring Together.

Family Home Visiting (👍) identified in the WSIPP search. As a selective intervention these programs involve professional staff visiting the homes of vulnerable mothers with the aim of ensuring a healthy pregnancy and postnatal family environment. These programs seek to reduce toxic stress risk processes. The Washington Institute of Public Policy (WSIPP) evaluation [51] found good evidence for economic returns. Based on 2 included studies there were small significant effects in reducing child internalising problems (Cox effect size post-intervention = -0.048, follow-up = -0.035, 2 studies [k = 2]). We found no evidence for effects on child anxiety or depression.

Triple P (?) is the dominant parent education model in Australia and internationally. There are variations of this program for pre-school, primary and adolescent age groups. The program is based on behavioural theory and organised such that different levels of intervention intensity are tailored to the severity of child behaviour problems. At the universal level, parent education materials on different topics are disseminated using behavioural social marketing (i.e. key messages disseminated using posters, brochures and other media) to all parents. Level 4 interventions are the most intensive and involve parents receiving assistance in personalised or group format sessions.

The most rigorous independent systematic review and meta-analysis is that reported by the WSIPP, 2018[51] (details in Appendix 2). Reviews are available of the universal and Level 4 groups. For the universal program, none of the included evaluations examined effects on internalising problems, anxiety or depression. The WSIPP review of the Level 4 groups identified small significant effects in reducing child internalising problems based on 1 study (Cox effect size post intervention = -0.025 and at first follow-up = -0.018, k = 1). The WSIPP evaluations identify Triple P to be cost-effective, based on economic returns from reduced child neglect and externalising problems (e.g. conduct problems).

Exploring Together (👍). Identified as addressing internalising problems through the WW4K search. Ran as a selective group program addressing secure attachment and emotional competence protective factors by encouraging effective parenting in the childhood years. Two evaluations report effects on internalising problems. Hemphill & Littlefield, [52] found the program had medium-sized effects in reducing child internalising symptoms (d = 0.57).

Family setting: primary school age period

Triple P and Exploring Together were summarised under pre-school and include primary school programs.

Coping Cat (👍👍👍) Similar to Coping Koala according to WSIPP. Identified in the WSIPP search, this is a selective and indicated group intervention for families with children identified with high levels of anxiety. The program focusses on emotional competence protective factors. The WSIPP (2018) evaluation found good evidence for economic returns. Based on 13 studies, there are medium effects in reduced child anxiety symptoms (Cox effect size post-intervention = -0.414, first follow-up = -0.191).

Families and Schools Together: (FAST: 👍👍) was identified as addressing internalising problems through the Australian Research Alliance for Children and Young People (ARACY) What Works for Kids (WW4K) and WSIPP searches. This is a selective group parenting program that addresses secure attachment and emotional competence protective factors by encouraging effective parenting in the childhood years. It is run as an after school program targeting selected parents and managed by trained facilitators. The WSIPP (2018) meta-analysis revealed the program had small effects in reducing child internalising (Cox effect size post intervention = – 0.056 and at first follow-up = -0.041, k = 7). Despite preventive effects on internalising in seven studies, we downgraded our evaluation to two thumbs due to negative economic evaluation findings due to negative academic test scores in one study (see Appendix 2).

Tuning into Kids/ Tuning into Teens (?) was identified as addressing internalising problems through the WW4K search. This program addresses secure attachment and emotional competence protective factors by focussing on the emotional connection between parents and children. There is evidence that the program reduces child externalising problems, but no studies so far have reported effects on internalising problems.

Strengthening Families (👍) Identified as addressing internalising problems through the WW4K and WSIPP searches. Run as either universal or selective groups, the program addresses secure attachment and emotional competence protective factors by encouraging effective parenting in the childhood years. The WSIPP (2018) evaluation included two studies and found small significant effects in reducing internalising problems (Cox effect size post-intervention = - 0.129, first follow-up = -0.094, two studies). The program was also found to have positive economic returns.

Family setting: secondary school age period

Triple P and Tuning into Teens were summarised in earlier sections and include programs for adolescents. One program was identified that focussed on adolescents, Resilient Families.

Resilient Families (?) was identified as addressing internalising problems through the WW4K search. This program addresses secure attachment and emotional competence protective factors by encouraging authoritative parenting in the adolescent years. There is evidence from one evaluation that the program has small selective effects in reducing adolescent depression one-year post intervention in adolescents with moderate baseline symptoms, where families attended parent education events.[19]

School setting

Most of the included literature reviews evaluated psychological interventions implemented in the school setting. These are mostly based on cognitive behavioural therapy (CBT) and mindfulness practices but also include interpersonal interventions. **In summary, the school psychological interventions show small**

significant effects in reducing internalising, anxiety and depression symptoms at post-intervention, with smaller but significant effects maintained in a number of programs at follow-up.

In later sections we report on three additional universal interventions that have been evaluated in schools: physical activity, Bullying Prevention, and the Good Behaviour Game. Although we found limited evidence for Bullying Prevention, physical activity and the Good Behaviour Game were rated respectively as 2and 3 thumbs. In what follows we examine school interventions in different developmental settings: Pre-school, primary and secondary school.

Pre-school setting

We identified limited evaluations of prevention interventions implemented in the pre-school setting. One study reported an evaluation of a psychological intervention (Friends for life) that aggregated findings for pre-school and primary school students.[53]

FRIENDS for Life (👍👍) identified in the review by Brunwasser and Garber [29] was implemented as a universal primary school program to prevent anxiety problems, with one study also reporting pre-school implementation. [53] The program is implemented by school staff. This program is based on CBT and seeks to reduce cognitive risk factors and increase emotional [4] competency protective factors. In studies completed in Australia, small significant effects were observed in preventing depressive symptoms at 6 –12-month follow-up (g = -0.24, CI - 0.34 to -0.14, k = 3), but not at post-intervention (g = -0.04, CI - 0.14 to 0.05, k = 4). There was significant heterogeneity between the studies. We were unable to source meta-analyses for effects on internalising problems or anxiety.

Primary and secondary school setting

School psychological interventions have been commonly implemented with both primary and secondary school age groups. In the sections that follows we overview the findings from the meta-analyses. The available evidence suggests school psychological interventions have small significant effects in preventing depression, anxiety and internalising, with similar effect sizes for primary and secondary school aged children.[48]

Stockings et al. [48] reported a series of meta-analyses of RCTs to examine preventive effects. Psychological (mostly school-based CBT) interventions were found to have significant medium sized effects at post-intervention in universal school populations (internalising Relative Risk [RR] = 0.39, CI 0.26 to 0.59, k = 9, N = 5115; anxiety RR = 0.25, CI 0.10 – 0.65, k=3, N=2023; and depression RR = 0.41, CI 0.24 – 0.69, k = 9, N = 5115). Effects were reduced at 6-9 month follow-up (internalising RR = 0.49, CI 0.37 to 0.64, k = 9, N = 1507,p < .05; anxiety RR = 1.10, CI = 0.45 – 2.51, k = 2, N = 1046, p = not significant; depression RR = 0.46, CI 0.35 – 0.62, k = 9, N = 1507,p < .05). At 12-month follow-up effects were not significant for internalising, anxiety or depression.

The Stockings et al. [48] review combined data from both primary and secondary school aged children (average age 12.6 years). Analyses were not provided to evaluate if effects were different by child age or when interventions were conducted in primary versus secondary school settings.

While not satisfying a number of the AMSTAR criteria, Corrieri et al. [30] evaluated primary and secondary school-based universal and targeted programs to prevent both anxiety and depression in children and adolescents. Pooled estimates showed small post-intervention effects for depression symptoms (d = -0.12, k = 19), with effects reduced at follow-ups at 6-months (d = 0.06, k = 5) and 10-30 months (d = -0.05, k= 8). For anxiety symptoms, effects were also small at post-intervention (d = -0.29, k = 6) and smaller at follow-up at 6-months (d = -0.10, k = 3) and 18-30 months (d = -0.05, k= 3). Corrieri et al. (2013)[30] did not analyse whether effects were different for interventions in primary versus secondary school settings.

In one of the higher rated reviews, Werner-Seidler at al.,[49] presented a meta-analysis that included 81 RCTs of primary and secondary school-based psychological prevention programs, 40 targeting depression, 24 anxiety, and 17 both outcomes. Pooled estimates revealed small effect sizes post intervention for both depression (g = 0.23, CI 0.19 to 0.28) and anxiety (g = 0.20, CI 0.14 to 0.25). Small significant effects were evident after 12-month follow-up for both depression (g = 0.11, CI 0.04 to 0.18) and anxiety (g = 0.13, CI 0.04 to 0.22). There was significant heterogeneity between studies.

Werner-Seidler et al., (p. 39) [49] found no significant effect size differences for school psychological interventions implemented in primary versus secondary school age groups. Child age did not explain significant heterogeneity in preventive effects for either depression or anxiety. The intervention effect sizes were similar at post-intervention and follow-up for depression and anxiety for children, early adolescents and older adolescents.

Werner-Seidler et al., (p. 39) [49] reported that externally delivered interventions were superior to those delivered by school staff for depression, but not for anxiety. A meta-regression analysis found that targeted (compared to universal) programs predicted larger effect sizes for the prevention of depression.

Kallapiran et al. [46] presented a series of meta-analyses evaluating the effects of psychological interventions based on mindfulness and acceptance and commitment therapy (ACT) interventions on anxiety symptoms. Fifteen RCTs were included 8 in non-clinical (universal) school samples. Mindfulness based stress reduction and mindfulness based cognitive therapy showed large and significant effects in reducing anxiety symptoms post-intervention when compared to non-active controls in nonclinical school populations (Hedges g = 0.96 CI 0.55 to 1.37, k = 3). There were insufficient studies to examine universal effects of ACT, however this intervention had a medium but non-significant effect on post-intervention depression when compared to active controls in clinical populations.

Moreno-Peral et al. [47] reviewed psychological and/ or educational interventions (mostly based on CBT) for their effects on anxiety in universal (non-clinical) populations. Meta-analysis revealed small post-intervention effects (d = −0.31 CI −0.40 to −0.21, p < .001, k = 29, n = 10,430). There was high heterogeneity. This meta-analysis combined findings across a range of settings and included both universal and selective samples.

In a review that rated high on AMSTAR criteria, Lawrence et al. [54] reported evaluations of selective and indicated psychological interventions to reduce anxiety. This review included 16 trials targeted to children and adolescents at risk of anxiety disorders. Targeting was based on family risk factors (e.g. parent anxiety disorder) or child risk factors (e.g. elevated anxiety symptoms, experiencing bullying). For the two trials reporting diagnostic outcomes, meta-analysis revealed significant effects post-program (RR = .09, CI .02 to .16) and at 12-month follow-up (RR = .31, CI .17 to .45).

Hetrick's et al., [5] Cochrane review evaluated the effects of psychological interventions (including cognitive behavioural therapy (CBT), interpersonal therapy (IPT) and third wave CBT)) in the prevention of depressive disorder in children and adolescents. Of the 83 trials that were included, 67 were in school settings, three in the community and four in mixed settings. Twenty-nine trials were carried out in universal (unselected) populations and 53 in targeted populations. Pooled analyses revealed small significant post-intervention effects (standardised mean difference SMD = -0.21, CI -0.27 to -0.15,p < .0001). Effects were maintained up to 4 to 12 months follow-up (SMD = -0.12, CI -0.18 to -0.05,p = .0002, k = 53, N = 11,913). The effect was no longer evident at the long-term follow-up. Hetrick et al's (2016) did not examine effect size differences for school psychological interventions implemented with primary versus secondary aged children.

Lee et al. [31] reported an economic evaluation of the cost-effectiveness of school-based psychological interventions to prevent depression. Their review found economic support for universal group-based interventions and indicated interventions delivered to students with subthreshold depression. Both

interventions were found to be cost-effective, however effects fell below the large returns achieved in a number of other widely implemented health interventions.

Given consistent evidence of heterogeneity (e.g. Hetrick et al.; Stocking et al.[5,48]), there is an argument for specific reviews of the effects of discrete programs (e.g. Brunwasser & Garber [29]) In what follows we report effects for specific psychological interventions and further details are provided in Appendix 2.

In what follows, information from the Brunwasser and Garber meta-analyses[29] is merged with other information sourced from grey literature searching to provide details on 11 manualised psychological interventions. In summary, 7 psychological intervention programs were identified to have evaluation evidence according with a 2 or 3 thumb rating: Friends (described earlier under pre-school programs); the Penn Resiliency Program; the Coping with Stress Course; Promoting Alternative Thinking Strategies; Blues Program/ Blues Peer Group; CBT Bibliotherapy; Interpersonal Psychotherapy Adolescents Skills Training. An additional two programs were rated one thumb (Problem Solving for Life, Acceptance and Commitment Therapy), while two programs were rated as question mark (Aussie Optimism and the Resourceful Adolescent Program). Details of the above programs are provided in what follows, with further information provided in Appendix 2.

Penn Resiliency Program (👍👍👍) identified in four of the included reviews.[5,29,37,41] This is a manualised group CBT based intervention delivered universally to all students in late primary or secondary school or to universal, selected or indicated adolescent groups targeted in locations such as primary care clinics or ethnic community centres. This program seeks to reduce cognitive risk factors and increase emotional competency protective factors. Brunwasser & Garber's meta-analyses [29] show small significant effects in preventing depressive symptoms at post-intervention (g = - 0.08, CI - 0.15 to - 0.01, k = 13) and at 6-30 month follow-up (g = - 0.19, CI - 0.27 to - 0.11, number of studies [k] = 12). Evaluation findings show high heterogeneity, with two studies reporting negative effects. We were unable to source meta-analyses for effects on internalising problems or anxiety.

Coping with Stress Course (👍👍👍). Identified in two of the included reviews. [29,40] This is a manualised group CBT based intervention delivered to selected secondary school age adolescents based on sub-clinical symptoms or targeted based on parents diagnosed with a depressive disorder in health care organisations. This program seeks to reduce cognitive risk factors and increase emotional competency protective factors. Brunwasser & Garber's meta-analyses[29] show medium sized significant effects in preventing depressive symptoms at post-intervention (g = - 0.33, CI - 0.47 to - 0.20, k = 4) and small effects at 12-33 month follow-up (g = - 0.18, CI - 0.32 to - 0.04, k = 4). We were unable to source meta-analyses for effects on internalising problems or anxiety.

Promoting Alternative Thinking Strategies (PATHS) (👍👍👍) identified in the review by WSIPP. Implemented as a universal primary school program to prevent internalising and externalising problems. The program is implemented by school staff. It is based on CBT and seeks to reduce cognitive risk factors and increase emotional competency protective factors. The WSIPP (2018) meta-analysis [51] reported reductions in internalising (Cox effect size post-intervention = -0.015, follow-up = 0.000, k = 7). Effects on anxiety and depression were not included in the meta-analysis. The economic analysis shows high returns due to improved school outcomes.

Blues Program/ Blues Peer Group (👍👍👍) identified in the review by Brunwasser & Garber [29] and in the WSIPP search. This is a manualised peer group intervention delivered to selected students with high (sub-clinical) depressive symptoms in secondary school. This program seeks to reduce cognitive risk factors, and increase emotional competency and social support protective factors. Brunwasser & Garber (2016) meta-analyses [29] show significant medium effects in preventing depressive symptoms at post-intervention (g = - 0.45, CI - 0.63 to -0.28, k = 3) and small significant effects at 6 - 24 month follow-up (g = - 0.21, CI - 0.38 to

-0.03, k = 3). There was low heterogeneity between the studies. There is also evidence that the intervention reduced depressive disorder after six months (OR = 0.12) and 24 months (OR = 0.53). Effects on internalising problems and anxiety are unknown. The WSIPP (2018, Program/537) meta-analysis found significant effects for major depressive disorder (Cox effect size post-intervention = -0.201, first follow-up = 0.000, k = 4). According to WSIPP this program is not cost effective.

CBT Bibliotherapy self-help using the Feeling Good Handbook (👍👍) Identified in the review by Brunwasser and Garber.[29] Selected secondary school students with high (sub-clinical) depressive symptoms were invited by researchers to complete the self-help Feeling Good Handbook.[55] This book is based on CBT and seeks to reduce cognitive risk factors, and increase emotional competency protective factors. Brunwasser & Garber meta-analyses [29] show significant effects in preventing depressive symptoms at post-intervention (g = -0.18, CI - 0.36 to 0.002, k = 3) and at 6 - 24 month follow-up (g = - 0.25, CI - 0.43 to -0.07, k = 3). There was low heterogeneity between the studies. The trials demonstrated effectiveness as youth were offered minimal guidance from the research team. We were unable to source meta-analyses for effects on internalising or anxiety.

Interpersonal Psychotherapy-Adolescents Skills Training (👍👍). Identified in the review by Brunwasser and Garber. [29] Implemented as a universal secondary school program with an indicated group component for students identified with high (non-clinical) depression symptoms. The program teaches communication and social skills and seeks to reduce social development risk factors and increase social support protective factors. Brunwasser & Garber meta-analyses show significant medium effects in preventing depressive symptoms at post-intervention (g = - 0.49, CI - 0.71 to -0.28, k = 3) and small significant effects at 3 - 18-month follow-up (g = - 0.24, CI - 0.46 to -0.01, k = 3). There was significant heterogeneity between the studies. There is evidence in one evaluation that the intervention reduced depressive disorder after six months. One trial found significant effects (effectiveness evidence) where the curricula was implemented by trained group leaders. Effects on internalising problems and anxiety were not included in the meta-analysis.

Problem Solving for Life (👍) Identified in the review by Brunwasser and Garber .[29] Implemented as a universal secondary school program with an indicated group component for students identified with high (non-clinical) depression symptoms. The program is implemented by school staff. It is based on CBT and seeks to reduce cognitive risk factors and increase emotional competency protective factors. Brunwasser & Garber meta-analyses [29] show small significant effects in preventing depressive symptoms at post-intervention (g = - 0.19, CI - 0.28 to - 0.11, k = 2) and non-significant effects at 12 - 33 month follow-up (g = 0.03, CI - 0.06 to - 0.12, k = 2). There were no effects on depressive disorders. The programs were delivered by teachers and hence represent an effectiveness trial. We were unable to source meta-analyses for effects on internalising problems or anxiety.

Acceptance and Commitment Therapy (ACT) (👍) Identified in the WSIPP search, a number of studies have evaluated this form of psychological intervention. ACT encourages participants to pursue their activities without being dominated by their emotions. The WSIPP report (2018, Program/757) revealed ACT in adolescent groups resulted in medium effects for major depressive disorder (Cox effect size post-intervention = -0.281, first follow-up = 0.000, k = 2, One thumb) and large effects for anxiety disorders (Cox effect size post-intervention = -0.450, first follow-up = 0.208, k = 1, WSIPP,2018, Program/756).

Aussie Optimism Program (?) Identified in two of the included reviews.[29, 37] This is a manualised group CBT based intervention delivered universally by school teachers to late primary or early secondary school students. This program seeks to reduce cognitive risk factors, and increase emotional competency and social support protective factors. Brunwasser & Garber meta-analyses [29] show non-significant effects in preventing depressive symptoms at post-intervention (g = - 0.09, CI - 0.19 to 0.01, k = 3) or at 9 month follow-up (g = -

0.03, CI - 0.13 to 0.08, k = 3). There is some heterogeneity between the studies. We were unable to source meta-analyses for effects on internalising problems or anxiety.

Resourceful Adolescent Program (RAP) (?). Identified in the review by Brunwasser and Garber [29] and in the WW4Ks search. Implemented as a universal secondary school program. The program is based on CBT and seeks to reduce cognitive risk factors and increase emotional competency protective factors. Brunwasser & Garber meta-analyses [29] show non-significant effects in preventing depressive symptoms at post-intervention (g = - 0.05, CI - 0.25 to 0.15, k = 2) or at 6 - 12 month follow-up (g = 0.12, CI - 0.004 to 0.25, k = 3). There is significant heterogeneity between the studies. We were unable to source meta-analyses for effects on internalising problems or anxiety.

In addition to psychological interventions, our search also identified three other universal school programs that have been evaluated for preventive effects in primary and secondary school populations: Physical activity, Bullying prevention and the Good Behaviour Game.

Physical activity interventions (👍👍) Identified in the reviews by Stockings et al [48] and Brown et al.[45] This is a group of interventions that have been implemented and evaluated by researchers as whole school interventions or in selective and indicated populations. These programs seek to reduce biological risk factors and enhance healthy lifestyle protective factors.

Stockings et al. [48] found that universal physical activity interventions had medium to large sized significant effects at post-intervention for: internalising (RR = 0.39, CI 0.26 to 0.59, k = 9, N = 5115); anxiety (RR = 0.25, CI = 0.10 to 0.65, k=3, N=2023); and depression (RR = 0.41, CI 0.24 – 0.69, k = 9, N = 5115). Smaller significant effects were maintained at 6 - 9 month follow-up for internalising (RR = 0.47, CI = 0.37 to 0.60, k = 10, N = 1915); and depression (RR = 0.45, CI 0.35–0.58, k = 10, n = 1915); but were not significant for anxiety (RR = 1.10, CI = 0.45 – 2.51, k = 2, n = 1046). Effects were non-significant at 12-month follow-up for internalising, anxiety or depression.

Brown et al. [45] also reviewed the effect of physical activity interventions in reducing depressive symptoms. The nine included studies incorporated both universal school interventions, and selective interventions implemented in varied settings including youth in prisons, in a socioeconomically disadvantaged school, from a Hispanic community and for youth with problems of obesity. The overall pooled effect showed a small but significant decrease in depression for the intervention relative to control groups (Hedges' g = - 0.26, SE = 0.09, 95% CI = -0.43, -0.08,p = .004, n = 281). Analysis revealed significant heterogeneity across the included studies. The two universal studies completed in schools showed the weakest effects. Despite there being a sufficient number of studies to warrant a higher rating, we downgraded our rating to 2 thumbs due to a lack of evaluation information as to which specific physical activity program should be implemented.

Bullying Prevention (?) Identified through the search of the WW4K site. The Olweus Bullying Prevention Program has been the most widely evaluated. Programs of this type seek to reduce social development and toxic stress risk factors. Although preventing bullying should theoretically have mental health benefits for both perpetrators and victims, the effects on internalising problems, anxiety and depression are unknown due to a lack of evaluation.

Good Behaviour Game (👍👍) This program was identified in the WSIPP search and uses classroom management strategies to reduce peer antisocial behaviour. In this way it reduces social development and toxic stress risk processes and increases social support protective processes. WSIPP (2018) meta-analyses showed small effects in preventing anxiety disorder (Cox effect size post-intervention = – 0.089 and first follow-up – 0.041, k =3) and major depressive disorder (Cox effect size post-intervention = – 0.118 and first follow-up – 0.000, k =3). WSIPP (2018) economic evaluations are highly favourable.

Community setting

A number of interventions implemented in community-settings to prevent and manage anxiety and depression show significant small to large effects for primary and secondary school age children, but have not been evaluated in pre-school age groups. Most evaluations have examined psychological interventions and physical activity. Mentoring also shows significant effects.

A number of the psychological and physical activity interventions that are implemented in schools are also implemented with selected or indicated samples in community settings, such as health care organisations, community centres and correctional institutions. Of the 11 included psychological interventions that were implemented in primary or secondary schools, 3 were also evaluated as selective or indicated interventions in community settings: the Penn Resiliency Program (👍👍👍); Coping with Stress Course (👍👍👍); and Friends (👍👍).

Stockings et al. [48] reported a series of meta-analyses evaluating the prevention effects for psychological and physical activity interventions in selected populations. Effects were of a similar magnitude to those reported above for the universal psychological interventions implemented in primary and secondary schools.

Stirling et al. [2] reported a meta-analysis of the effect of community-level factors on child and adolescent depressive symptoms. This review found that low community safety and community minority ethnicity and discrimination were small but significant risk factors for depressive symptoms in school-aged children. Community disadvantage showed overall risk effects and community connectedness was protective, however these effects were indirect and explained by other risk factors. Of the included studies, three were evaluations of community interventions that aimed to reduce the effects of socioeconomic disadvantage (neighbourhood relocation, obtaining casino income for an Indian reservation and microfinance for children that had lost a parent to AIDS). Meta-analysis showed these interventions achieved small but non-significant reductions in child and adolescent depressive symptoms ($d = 0.127$, $N = 1903$, $p = .055$, $k = 3$). The Stirling review was unable to identify evaluations of community interventions targeting the more direct risk factors of low safety and discrimination.

Community setting: pre-school age period

The identification of interventions at the individual, school, family, and community levels is in line with ecological theories of the reciprocal developmental influences that contribute to child and adolescent anxiety and depression. The two interventions below are community coalition models that seek to strategically integrate prevention strategies to address multiple risk and protective factors to maximise the effectiveness of prevention interventions.

Communities for Children (?) identified in the WW4K search. This is a community intervention that supports coalitions in disadvantaged Australian communities to implement effective child development programs. Evaluations show this model improves the coordination and implementation of evidence-based practices within targeted geographic service regions. However, effects in preventing child internalising problems, anxiety or depression are unknown. The cost effectiveness of this program is unknown.

Community setting: primary and secondary school age period

Communities That Care (?) identified in the WW4K and WSIPP searches. This is a manualised community intervention that supports community coalitions to assess risk and protective factors for children and adolescents and to use this data to select and implement effective prevention programs. Effects in preventing internalising problems, anxiety or depression are unknown. According to WSIPP this program is cost effective due to positive effects in increasing the implementation of effective prevention programs and preventing tobacco use, and crime and increasing school completion.

Two additional interventions were identified that are implemented in the primary and secondary school age period: Mentoring and Online CBT. These interventions are described in the following sections and were evaluated as 1 and 2 thumbs respectively.

Mentoring for children with disruptive behaviour disorders (👍) This program was identified in the WSIPP search. An adult provides guidance and support to a child with behavioural problems. In this way it reduces social development risk processes and increases social support protective processes. WSIPP (2018) meta-analyses showed very large effects in preventing internalising symptoms (Cox effect size post-intervention = – 0.746 and first follow-up – 0.544, k = 2).

Online cognitive behavioural therapy (👍👍) Identified in the WSIPP search. This is an interactive online CBT program for children with high levels of anxiety. According to WSIPP this program had significant small to medium prevention post-intervention effects, that reduced at follow-up (Cox effect size anxiety disorders post-intervention = -0.439, first follow-up = -0.203, k = 5. Major depression post-intervention and first follow-up = 0.000, k = 1). The effects on internalising problems are unknown. This intervention was evaluated as cost effective (Benefits minus cost $US7,599). Although there are effects in more than four evaluations, we downgraded our rating to 2 thumbs as evaluations are not yet specific as to the programs to be implemented. Three online program options are listed in Appendix 2.

Gaps in the evidence

We examined the settings and age groups where interventions have been evaluated. Table 1 revealed limited interventions that have been evaluated in the pre-school age period. This may be an important age period to consider for future innovation in prevention programs.

To date family level interventions have had few evaluations relative to psychological interventions. There is a need for increased innovation and evaluation to further trial family level interventions. As child onset internalising symptom pathways are known to be influenced by family risk factors in the perinatal age period (0 - 2 years), it is important to further evaluate family interventions in the pre-school setting.

Our thumb ratings were based on evidence for impacts on internalising problems, anxiety and depression. In the family intervention Triple P, the one thumb rating was incongruent with the high economic returns for the prevention of problems such as child neglect and externalising behaviour. These findings reinforce the priority for further mental health evaluation of family interventions that are known to be effective in preventing other child and adolescent problems.

Stirling et al. [2] presented evidence that community level factors related to insecurity and fading racial and other minority group discrimination make small but significant contributions to child and adolescent depression. Future program development and research should investigate community interventions to address these community level risk factors.

A surprising finding was that the effects of bullying prevention programs on child internalising problems, anxiety and depression are unknown due to a lack of evaluation. Given that bullying prevention programs are theoretically linked to mental health benefits for both perpetrators and victims, future bullying prevention evaluations should investigate these effects.

The present review identified evaluations of physical activity interventions. However, there is evidence that other healthy lifestyle factors, such as good nutrition and sleep, and avoiding substance misuse, may also contribute to adolescent mental health.[3,4] Future program development and research should investigate the preventive benefits of child and adolescent healthy lifestyle interventions.

Our report identified a range of types of interventions in varied age periods and settings. The range of interventions align with ecological theories arguing that multi-level factors contribute to child and adolescent anxiety and depression. Community level interventions were identified that use coalition models

to strategically integrate prevention services to address a range of risk and protective factors. At this stage there has been limited evaluation of the effects of these coalition models on child and adolescent internalising problems, anxiety or depression. Future program investment and evaluation should seek to establish whether community coalition models can offer a means of maximising prevention effects by improving the coordination of different interventions within settings.

The included reviews summarise a large number of randomised trials, the majority evaluating psychological interventions. Hetrick et al, [5] argued that future evaluations of the effects of psychological interventions should adopt active controls. Evaluations completed to date cannot rule out the possibility that some of the change seen in study participants may arise from being in the intervention arm of a trial or research study.

The review studies consistently identify heterogeneity of effects across psychological interventions. In some cases, heterogeneity is also evident when specific programs are evaluated (e.g. Penn Resiliency Program, FRIENDS, Interpersonal Psychotherapy). This suggests that future evaluation research is required to better understand the factors that explain variation in program outcomes (e.g. service delivery staff and setting, implementation fidelity monitoring). Variations in programs and implementation models should be competitively evaluated to distil critical components and superior models.

Although significant effects are evident for a number of programs at post-intervention, effects are typically smaller at follow-up. Future evaluations should investigate how to sustain longer-term intervention effects.

Lawrence et al [54] identified the need for further research to evaluate the most cost-effective approaches. Their review identified online universal programs to be a priority for further economic evaluation, in view of their potentially low implementation cost.

We noted in a number of cases the WSIPP economic evaluations[51] estimate relatively small economic benefits for the prevention of internalising problems and depression, while preventing school problems are estimated to have large long-term economic returns (see Appendix 2 for - Families and Schools Together, Blues Program/ Blues (Peer) Group, and Acceptance and Commitment Therapy for depression). The WSIPP estimates also factor in costs that are specific to the Washington State service context (e.g. agency health care returns for treating child anxiety). These observations suggest that there is an economic research gap in quantifying the long-term costs of depression and in providing ready access to pricing estimates of prevention programs for the Australian context.

Discussion

In overview, this report has identified that there is high quality evidence to answer the question: What programs or services for children and young people have been shown to be effective in the prevention of, and early intervention for, mild depression and anxiety?

The finding that prevention 'works' aligns with recent international reports that advocate for increased implementation of mental health promotion.[7] Our review found that the most commonly evaluated strategy was universal psychological interventions implemented in primary and secondary school settings. Our first recommendation is based on consistent evidence for the efficacy of school-based psychological interventions.

Recommendation 1: That state and national authorities set aside funds to enable pilot studies to evaluate the effect of Australian school students receiving a minimum of one term of school-based psychological interventions in both late primary and early secondary school.

On average the effective programs involve around 10 classroom sessions;[5] hence we recommend evaluating the effect of students receiving at least this number of sessions during their late primary and early secondary school years.

Making available specific funding support to purchase prevention programs could initiate a market to support the dissemination of effective programs. Funding support to purchase prevention programs could also come with a requirement to monitor and achieve agreed student mental health targets. The evaluations of the 11 psychological intervention programs identified in this report include systems for monitoring student mental health outcomes.

Of the 11 manualised psychological interventions that are implemented in primary and secondary schools, 7 were identified to have evaluation evidence according with a 2 or 3 thumb rating: Friends; the Penn Resiliency Program; the Coping with Stress Course; Promoting Alternative Thinking Strategies; Blues Program/ Blues Peer Group; CBT Bibliotherapy; and Interpersonal Psychotherapy Adolescents Skills Training. It was noteworthy that despite there being a number of Australian school-based psychological intervention programs, the 2 and 3 thumb ratings were mostly achieved by the USA-based programs.

As the Australian programs are similar in content to the US interventions, it seems reasonable that with further support for program development and evaluation Australian programs, such as Aussie Optimism and the Resourceful Adolescent Program, should have the potential to consistently demonstrate positive effects.

It is possible that the weaker effects reported in the Australian programs may be partly related to differences in implementation models, rather than program content. A number of the Australian programs (Aussie Optimism, Friends, Resourceful Adolescent Program) that were implemented by school staff had either non-significant effects, or effects that were not sustained at follow-up (Friends). Given that the Werner-Seidler at al. review [48] found that externally-delivered interventions were superior to those delivered by school staff for depression, it is important for Australian psychological interventions to conduct outcome and economic evaluations to test the effects of different implementation models and staffing. These considerations lead us to our second recommendation.

Recommendation 2: That Australian research agencies prioritise funds to support the evaluation of child and adolescent depression and anxiety prevention programs.

With research funding support it will be feasible to test whether the effects of school psychological interventions improve, while maintaining economic benefits, when psychologists, mental health staff or peer leaders (i.e. blues group) implement programs.

In areas other than psychological interventions, six programs were identified as having sufficient evidence to warrant a two or three thumb evaluation. These were: Coping Cat (👍👍👍); Families and Schools Together (👍👍); Physical activity interventions (👍👍); the Good Behaviour Game (👍👍); Mentoring (👍👍); and Online CBT (👍👍).

Table 1 identified six family programs that were evaluated with a question mark or 1 thumb: Home visiting; Triple P; Exploring Together; Tuning into Kids/ Teens; Strengthening Families; and Resilient Families. Prioritising prevention research funds would enable further refinement and evaluation of prevention programs in the family setting.

The evidence summarised in this review supports the implementation of a mixture of universal, selected and indicated prevention approaches within the family, school and community settings. There is currently insufficient evidence to confidently identify a superior approach to the prevention of anxiety, depression or internalising. Werner-Seidler et al. [48] presented subgroup analyses that suggested universal psychological intervention programs for depression prevention had smaller effect sizes at post-test relative to selected and indicated programs. For anxiety, effect sizes were comparable for universal and selected and indicated programs. In contrast, Stockings et al. [48] found larger reductions in depressive disorders for universal preventions compared to selective and indicated prevention. It is possible that the most effective approaches might involve a combination of intervention types being implemented within the family, school and community settings.

A common finding identifed in our review, relevant to both psychological interventions and other program evaluations, is that effects tended to diminish in size over time. One explanation for this phenomenon may be found in the complex range of risk and protective processes that we summarised in the introduction that operate in different settings to influence child- and adolescent-onset internalising, anxiety and depression trajectories. The results of our review revealed that many of the intervention programs that we identified in Table 1 tend to address one or two of the risk or protective processes we outlined in the introduction. However, in order to achieve sustained prevention effects, it may be necessary to address multiple risk and protective processes.

A common finding in public health is that risk and protective factors do not operate in isolation and hence, population behaviour change is more likely to be achieved where efforts to address risk processes are reinforced at different age periods and across diverse settings.[3] These considerations lead to our third recommendation.

Recommendation 3: That in addition to school psychological interventions (Recommendation 1) funding be made available to evaluate the effect of a mixture of universal, selective and indicated prevention interventions being strategically planned for implementation in different settings within health service regions.

In line with ecological theories, the present report identified evidence for a range of different types of interventions in varied age periods and settings. Future program investment and evaluation should seek to evaluate whether community coalition models can offer a means of maximising prevention effects by improving the coordinated implementation and evaluation of different interventions in family, school and community settings within specific geographic service regions.

Table 1 identifies two community coalition models that currently operate across Australia. To date evaluations show that these coalition models are effective at improving the coordination and implementation of evidence-based practices within targeted geographic service regions. Currently there has been insufficient evaluation to identify whether these models contribute to community-level prevention of child and adolescent internalising problems and anxiety and depression.

Given the ecological context of risk and protective factors, it is feasible that community coalition models can make a valuable contribution to the strategic planning and implementation of prevention services within a geographic region. It is likely that increasing such services will improve not just mental health outcomes, but also prevent problems in other areas related to physical health and health behaviour, crime and violence, and failure to engage in education and employment.[56]

Applicability

In summary, we evaluated the mixture of prevention interventions identified in this report to be applicable for implementation in Australia both in universal and targeted populations. Available evidence suggests that interventions to prevent anxiety, depression and internalising problems can be targeted to socioeconomically disadvantaged communities[2] and culturally and linguistically diverse communities.[45] The available evidence suggests that interventions can be successfully targeted to selective and indicated groups including youth in corrections institutions and recruited from health and mental health services.[46]

Conclusion

A range of high quality literature reviews were identified and these studies demonstrated that preventive interventions have small but significant post-intervention effects in reducing anxiety, depression and internalising problems in children and adolescents. In total, 13 programs (7 school psychological interventions and 6 other programs 2 family, 2 school, and 2 community) were identified with sufficient evidence to warrant a 2 or 3 thumb rating. The existing research is unable to detect consistent differences in effect sizes for universal, selected and indicated interventions. A number of gaps in knowledge were identified. We made three recommendations for disseminating prevention programs and for research to identify superior intervention models. Identifying models that can cost-effectively integrate prevention services to sustain effects over longer than 12-month follow-up periods is an important priority.

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Appendix 1

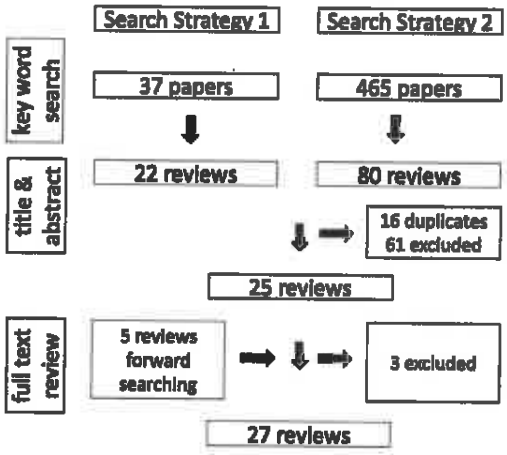


Figure A1: Flowchart of the literature selection process

Table A1: AMSTAR ratings for the 27 included studies

Citation	AMSTAR Total	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16
Ahlen et al. (2015)[37]	10	1	0	1	1	1	1	0	1	0	0	1	0	0	1	1	1
Bennet et al. (2018)[37]	6	1	1	1	1	0	1	0	0.5	0	0	N/A	N/A	0	N/A	N/A	1
Brown et al. (2013)[45]	13.5	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1
Brownlee et al. (2013)[47]	6	1	1	1	1	0	0	0	0	1	0	N/A	N/A	1	N/A	N/A	0
Brunwasser et al. (2016)[39]	5.5	1	0	1	1	0	0	0.5	0	0	0	1	0	0	0	0	1
Clarke et al. (2015)[46]	10	1	1	1	1	1	1	0	1	1	0	N/A	N/A	1	N/A	N/A	1
Conrod et al. (2013)[40]	6.5	1	0	1	1	0	0	1	1	0	0	0.5	0	0.5	0.5	0	1
Fleming et al. (2014)[34]	5.5	1	0	1	1	1	1	0	1	0	0	N/A	N/A	NA	NA	0	0
Franklin et al. (2017)[38]	10.5	1	0	1	1	1	1	0	0.5	1	0	1	1	1	0	1	0
Sanchez-Hernandez et al. (2014)[44]	9.5	1	0	1	1	0	0	0	1	0	0	N/A	N/A	0	N/A	N/A	0
Hetrick et al. (2010)[42]	11	1	1	1	1	1	1	0	0.5	1	0	1	1	0	1	0	1
Hetrick et al. (2016)[3]	15	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
Kallapiran et al. (2015)[43]	13.5	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1
Kohut et al. (2017)[35]	7	1	0	0	1	1	1	1	1	0.5	0	N/A	N/A	0.5	N/A	N/A	1
Lawrence et al. (2017)[36]	12.5	1	1	1	1	1	1	0	1	1	0	1	1	0	0.5	1	1
Lee et al. (2017)[41]	6	1	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0

Citation	AMSTAR Total	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16
Moola et al. (2014)[32]	4	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1
Moreno-Peral et al. (2014)[31]	14	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
Mychailyszyn et al. (2017)[33]	7.5	1	1	1	1	0	0	0	1	0	0	1	0	0	1	1	1
Reising et al. (2017)[41]	10	1	1	1	1	0	0	1	1	0	1	1	0	0	1	0	1
Sandler et al. (2014)[55]	6	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1
Stirling et al. (2015)[7]	14.5	1	1	1	1	1	1	1	1	0.5	1	1	1	0.5	1	0.5	1
Stockings et al. (2016)[30]	11.5	1	1	1	1	0	1	0	0.5	1	0	1	1	1	1	0	1
Tyrer et al. (2014)[50]	8	1	1	1	1	0	1	0	1	0	0	1	0.5	1	0	0	0
van Genugten et al. (2017)[54]	10	1	1	1	1	1	1	0	0	0	1	0	1	0	1	1	0
van Zoonen et al. (2014)[52]	8	1	0	1	1	0	0	0	0.5	0.5	1	1	1	0	1	0	0
Werner-Seidler et al. (2017)[53]	12.5	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0.5	0

Note: AMSTAR2 Criteria. A1= Review includes evaluations with control groups of interventions with children or adolescents to prevent anxiety or depression. 1 = Yes. A2 = Review states that the methods were established prior to the conduct of the search and extraction and any significant protocol deviations were justified (Not Partial if no risk of bias assessment; Yes = synthesis plan, heterogeneity examined, protocol deviations justified). 0.5 = partial, 1 = Yes. A3 = Review states the study designs that were included (e.g. randomised trials). 1 = Yes. A4 = Review describes a comprehensive literature search strategy (Yes = searched reference lists + registries + grey literature + consulted experts + searched within 24 months). 0.5 = partial. 1 = Yes . A5 = Review study selection was cross-checked (duplicated)?. 1 = Yes. A6 = Review extraction was cross-checked (duplicated)?. 1 = Yes. A7 Partial = Review included a table of excluded studies, Yes = reasons given for exclusions?. 0.5 = Partial, 1 = Yes. A8 Included studies are adequately described (Partial = populations, interventions, comparators, outcomes, designs Yes = Also setting, followup timeframe)?. 0.5 = Partial, 1 = Yes. A9 Assessed risk of bias. Partial = unconcealed allocation and lack of blinding. Yes = allocation not random and selection of results from multiple measures. 0.5 = Partial, 1 = Yes. A10. Reported sources of funding for the included studies?. 1 = Yes. A11 Meta-analysis. Appropriate methods for combining results?. 1 = Yes A12.

Meta-analysis. Assessed risk of bias in studies?. 1 = Yes. A13. Risk of bias interpreted in discussion of results?. 1 = Yes. A14. Satisfactory explanation and discussion of observed heterogeneity?. 1 = Yes. A15. Meta-analysis. Investigated and discussed publication and small study bias?. 1 = Yes. A16. Reported and management strategy for conflict of interest?. 1 = Yes.

Appendix 2: Information on the interventions presented in Table 1

Family interventions

1. Family Home Visiting

Evaluation outcomes

www.wsipp.wa.gov/BenefitCost/Program/35. (2 included studies child internalising Cox effect size post-intervention = -0.048, follow-up = -0.035. No estimate for depression or anxiety, WSIPP, 2018) ().

www.aracy.org.au/projects/righthome

Target audience

Selected mothers assessed as vulnerable for parenting risk factors

Reach

Commonly targeted to socioeconomically disadvantaged parents.

Referral pathways

Parents are commonly referred by welfare, corrections or healthcare organisations.

Components:

Manualised curricula delivered to paraprofessional staff.

"The Nurse Family Partnership program provides intensive visitation by nurses during a woman's pregnancy and the first two years after birth. The program is designed to serve low-income, at-risk pregnant women expecting their first child. The goal is to promote the child's development and provide support and instructive parenting skills to parents. Among programs included in the meta-analysis, participants received 25–35 home visits on average, spread over approximately two years."

An Australian RCT is currently in progress implemented in Maternal Child Health (MH) services, but has not yet published outcomes for child emotional adjustment (www.aracy.org.au/projects/righthome). In the Australian trial services are provided "beginning during pregnancy and continuing until the child reaches two, parents who take part ... receive 25 home visits" (www.aracy.org.au/projects/righthome).

Workforce requirements

These programs are implemented in Australia by trained maternal child nurses who are supported by social workers (www.aracy.org.au/projects/righthome).

Cost-effectiveness

Benefits minus cost: "$US 1,827 per participant = Costs $US 11,819, Benefits $US 13,646" (2 included studies child internalising Cox effect size post-intervention = -0.048, follow-up = -0.035. No estimate for depression or anxiety, WSIPP, 2018 ()

Minority populations

Programs of this type have been implemented with diverse populations including parents: from low SES backgrounds, Aboriginal and Torres Strait Islander backgrounds; from culturally and linguistically diverse (CALD) backgrounds and nations. We found no reports of delivery for LGBTI people.

2. Triple P Positive Parenting Program – Universal and Level 4 Groups

Evaluation outcomes

http://whatworksforkids.org.au/program/triple-p-positive-parenting-program (well supported)

http://www.wsipp.wa.gov/BenefitCost/Program/79 (WSIPP, 2018, Universal Triple P: No effect estimates for internalising, anxiety or depression)

http://wsipp.wa.gov/BenefitCost/Program/81 (WSIPP, 2018, Level 4 groups: 1 included study internalising Cox effect size at post intervention = -0.025 and at first follow-up = -0.018). We did not identify meta-analysis estimates for depression or anxiety.

Target audience

Selected parents reporting children to be exhibiting behaviour problems

Reach

A broad range of parent demographics are relevant.

Referral pathways

Parents may self-refer or be referred by organisations.

Components

Manualised curricula delivered to parent groups.

"Triple P Positive Parenting Program (system) is a universal prevention program that aims to increase the skills and confidence of parents to prevent the development of serious behavioral and emotional problems in their children. Triple P has five levels of intensity. The first level is a media campaign that aims to increase awareness of parenting resources and inform parents about solutions to common behavioral problems. Levels two and three are primary health care interventions for children with mild behavioral difficulties, whereas levels four and five are more intensive individual- or class-based parenting programs for families of children with more challenging behavior problems" (WSIPP, 2018, Program/79).

"Triple P—Positive Parenting Program (Level 4, group) is an intensive class-based parenting program for families of children with more challenging behavior problems. The focus is learning skills and role-playing strategies to cope with and correct behavior problems" (WSIPP, 2018, Program/81).

"Triple P draws on social learning, cognitive behavioural and developmental theory as well as research into risk factors associated with the development of social and behavioural problems in children. It aims to equip parents with the skills and confidence they need to be self-sufficient and to be able to manage family issues without ongoing support" ... "Level 4 is for parents of children with severe behavioural difficulties (or in the case of Group Triple P/Group Teen Triple P, for motivated parents interested in gaining a more in-depth understanding of Positive Parenting). It is available for parents of children from birth to 12 years and 12–16 years and is delivered as a". ... group "course of 10-12 hours contact" (WW4K, 2018).

Workforce requirements

The Level 4 groups are delivered by a broad range of professionals that have been accredited after successfully completing the training courses. "Most training is either two or three days with accreditation to follow, usually 6--8 weeks later. Some training course may have prerequisites" (WW4K, 2018). Training

courses run in different Australian states and are advertised on the Triple P website (https://www.triplep.net/glo-en/getting-started-with-triple-p/training-for-individuals/).

Cost-effectiveness

Benefits minus cost: "$US 2,201 per participant = Costs $US 560 (Estimated as a profitable program for Washington State agencies as courses can run on a sliding scale and operate at an overall profit for agencies). Benefits $US 1,641" (WSIPP, 2018, Program/81: 1 included study internalising Cox effect size post-intervention = -0.025, follow-up = -0.018. No estimate for depression or anxiety). (☹).

Minority populations

Triple P has been implemented successfully with a range of parents including: from low SES backgrounds, Aboriginal and Torres Strait Islander; and people from culturally and linguistically diverse (CALD) backgrounds and nations. We found no reports of delivery for LGBTI people.

3. Exploring Together

Evaluation outcomes

http://whatworksforkids.org.au/program/exploring-together-primary-school-program (Supported)

https://www.kidsmatter.edu.au/primary/programs/exploring-together (2 studies, 1 thumb). Significant reductions in depression/anxiety symptoms at 6 months. (Hemphill & Littlefield, 2001: internalising d = 0.57). Both studies are relatively small and have not been audited in an independent systematic review.

Target population

Children selectively targeted in pre-school and primary school.

"Exploring Together is a short-term, multi-group, early intervention program for children at risk of developing serious emotional and behavioural problems, their parents/carers and teachers. It targets primary school-aged children between 6 and 14 year of age. The program focuses on developing children's social skills and reducing their problematic behaviour, enhancing parenting practices, and strengthening family units." (WW4K, 2018).

"The target group for Exploring Together multi-group programs are primary school children showing early signs of emotional and behavioural problems including aggression, impulsivity, anxiety, social withdrawal, problematic peer, parent-child and family relationships. These children and their families require intensive early intervention.

There are two versions of the multi-group program for primary school aged children. The Exploring Together Pre-School/ Early Primary School Program is for children aged 3 ½ to 7 years. The Primary School Program is suitable for 7 to 14 year old children (KidsMatter, 2018).

Reach

Separate workshop-style groups run concurrently for children and parents, followed by a combined session.

Referral pathways

Children are typically identified and referred for participation by teachers, though self-referral is possible.

Workforce requirements

Facilitators are trained professionals and expected to have some sort of psychology, social work, or mental health professional background. Teachers are also applicable. Training varies in length and cost depending upon specific components of the program, though training appears to take a maximum of 2 days (via workshop). The cost of training is $440, and the manual itself is $85. Training costs are estimated on proximity to Melbourne, and incur additional travel costs outside the metropolitan region.

Cost-effectiveness

Very little information is available to perform a cost benefit analysis. However, one such report that did touch upon the cost of implementing the program in the Tiwi Islands concluded that despite increased costs of "fly-in, fly-out" facilitation, the program was effective though likely unsustainable due to the costs involved. This is unlikely to be the case for the more common implementations, however.

Minority populations

The programs have been used extensively with families from a diverse range of cultural, linguistic and socio-economic backgrounds. A version of the program has also been specifically developed and evaluated for use with Indigenous Australians." (KidsMatter, 2018).

4. Coping Cat/ Coping Koala

Evaluation outcomes

http://www.cebc4cw.org/program/coping-cat/

CEBC Evidence Rating 1 — Well-Supported by Research Evidence
http://wsipp.wa.gov/BenefitCost/Program/66 (WSIPP, 2018, 13 included studies anxiety disorders Cox effect post-intervention = -0.414, first follow-up = -0.191). Effects on depression and internalising unknown (👍👍👍)

Target audience

Children experiencing problematic levels of anxiety aged: 7 – 13 (CEBC, 2018)

Reach

A broad range of child and family demographics are relevant.

Referral pathways

Parents may self-refer or be referred by organisations.

Components

Manualised curricula delivered to groups of (1) children; and (2) parents.

Group-based manualised "16 week program some sessions for parents/caregivers. The computer-assisted intervention, Camp Cope-a-Lot, is 12 sessions with less than half of the sessions requiring professional time" (CEBC, 2018).

"Treatments usually include multiple components, such as strategies to control physiological responses to anxiety, cognitive restructuring and self-talk, exposure to feared stimuli, and positive reinforcement. This brief therapy can be administered in individual, group, or family format; well-known examples include the Coping Cat and Coping Koala programs". The WSIPP benefit costs results are those from group formats".

Workforce requirements

The programs are delivered by a broad range of professionals that have been accredited after successfully completing the training and accreditation requirements. ELABORATE

Cost-effectiveness

Benefits minus cost: "$US 6,612 per participant = Costs $US 418 (Estimated as a profitable program for Washington State organisations that can offer programs on a sliding scale for families and can benefit from health system returns for child treatment), Benefits $US 6,194" (WSIPP, 2018, 13 included studies anxiety disorders Cox effect post-intervention = -0.414, first follow up = -0.191 - 👍👍👍. Effects on depression and internalising unknown).

Reason for including a treatment

Cost-effective group-based and online family program, evaluations show potential to extend to indicated

Minority populations

We were unable to find information on the implementation of Coping Cat/ Coping Koala with: low SES backgrounds; physical disability; Aboriginal and Torres Strait Islander; people from culturally and linguistically diverse (CALD) backgrounds; LGBTI people.

5. Families and Schools Together (FAST)

Evaluation outcomes

http://www.cebc4cw.org/program/baby-fast-groups-for-young-mothers/ (Efficacy unable to be evaluated for infants and early childhood).

https://www.kidsmatter.edu.au/primary/programs/families-and-schools-together-fast (Good evidence of efficacy for enhanced family functioning, preventing children at-risk from experiencing school failure, preventing alcohol and other drug abuse, reducing the stress experienced by parents and children from daily life situations).

http://whatworksforkids.org.au/program/families-and-schools-together-fast-0 (Well supported)

http://wsipp.wa.gov/BenefitCost/Program/150 (WSIPP, 2018: Meta-analysis from 7 studies shows the program reduces internalising symptoms (Cox effect size post intervention = – 0.056 and at first follow-up = -0.041) (downgraded to 2 thumbs due to negative economic returns based on one study [see below]).

Target population

Children universally targeted in primary schools (with some trials in secondary schools). Program is usually targeted towards children who are considered at risk for educational failure or other problems.

Reach

Designed for children and families (children are invited to attend with parents/guardians).

Referral pathways

Children are identified by educators, who then refer children/parents into the program.

"Families and Schools Together (FAST) is a multi-family after school program intended to increase parents' involvement in school and their child's education, increase parent-child bonding and communication, and enhance parents' self-efficacy. Groups of 8 to 12 families meet weekly for eight consecutive weeks. Sessions last about 2½ hours and take place after school or early in the evening. Trained facilitators conduct the meetings, which involve experiential learning, parent-child play, and a shared meal. The initial eight weeks are followed by two years of monthly parent-led meetings".

Workforce requirements

The program is delivered by trained facilitators, who first undergo an internship of at least 5 days (2 days training, 3 days on site workshop delivery).

Cost-effectiveness

The WSIPP (2018, Program/150) evaluation found the program was not cost effective: $US – 3,500 loss per child treated, $US - 909 program costs, $US – 2,671 (negative benefits). The economic loss is mainly due to large negative costs associated with a small negative effect on academic test scores in one study. Hence, these negative economic findings should be considered with caution.

Minority populations

"FAST has been shown to have positive outcomes for children from low socio-economic or disadvantaged family backgrounds. Positive outcomes have also been reported with indigenous children, including indigenous children living in remote indigenous communities, children from culturally and linguistically diverse backgrounds and with children from rural areas." (KidsMatter, 2018).

6. Tuning in to Kids / Tuning in to Teens

Evaluation outcomes

http://whatworksforkids.org.au/program/tuning-in-to-kids (Supported – Question mark for internalising)

https://www.kidsmatter.edu.au/early-childhood/programs/tuning-kids (Rated 4 out of 5 stars (Good) for early childhood/primary school aged children, though the specific outcomes are not individually assessed.)

http://www.cebc4cw.org/program/tuning-in-to-kids-tik/ (2 – Medium for younger children and teens).

Evidence from at least one study to suggest that the positive effects of the program are sustained for at least 6 months.

Target population

Broad targets – the program is described as suitable for both universal and selective approaches.

Reach

Tuning in to Kids/Teens and variants are aimed at parents and primary and secondary age children.

Referral pathways

The program is self-initiated by schools/organisations, and the organisation itself advertises various meetings and workshops for interested parents.

Components

Manualised curricula delivered to parent groups.

The program is delivered in six 2-hour sessions, plus two booster sessions run in two month intervals after the program conclusion.

"Tuning in to Kids™ is an evidence-based parenting program that focuses on the emotional connection between parents and children. In particular the program teaches parents skills in emotion coaching, which is to recognise, understand and respond to children's emotions in an accepting, supportive way. This approach helps the child to understand and manage their emotions. ...Program variants include Tuning in to Toddlers, Tuning in to Kids, Tuning in to Teens, Dads Tuning in to Kids and Trauma-focused Tuning in to Kids. A version of the program for parents of anxious children and for parents of children with chronic illness have both been evaluated with publications to follow shortly." (WW4K, 2018).

Workforce requirements

The program is designed to be delivered by trained professional staff who have completed the facilitator training provided by Tuning in to Kids. Training appears to typically involve attending a 2-day workshop.

Cost-effectiveness

No information available at this time.

Minority populations:

No specific evidence for efficacy in diverse samples.

7. Strengthening Families Program

Evaluation outcomes

http://whatworksforkids.org.au/program/strengthening-families-program (supported)

http://wsipp.wa.gov/BenefitCost/Program/138 (WSIPP, 2018, 7 included studies, 2 included for internalising Cox effect size post-intervention = - 0.129, at first follow-up = -0.094 – one thumb).

Target audience

In Australia the target has been primary school aged children. Programs are offered either universally to all parents in a primary school or for selected families with children experiencing behaviour problems.

Reach

Universal reach, but is also delivered to selective populations in disadvantaged primary school. Internationally the program is also offered selectively to parents in corrections and substance abuse treatment programs.

Referral pathways:

Universal programs invite all families in a location such as a primary school. Selected parent programs have been run in: disadvantaged primary schools. Internationally the program is also offered selectively to parents in corrections and substance abuse treatment programs.

Components

Manualised curricula for (1) parents; (2) students; and (3) groups.

"The Strengthening Families Program (SFP) is a nationally and internationally recognized parenting and family strengthening program for high-risk and regular families with different age versions from birth to 17 years of age. Culturally adapted versions with different languages were tested and found effective in 36 countries including Australia — the first international implementation in Queensland" (WW4K, 2018)

The universal version, "Strengthening Families for Parents and Youth 10-14 (also known as the Iowa Strengthening Families Program) is a family-based program that attempts to reduce behavior problems and substance use by enhancing parenting skills, parent-child relationships, and family communication. The seven-week intervention is designed for 6th grade students and their families.".

Workforce requirements

In Australia the program is managed by Barwon Child Youth and Family Services in Geelong, Victoria. The program is delivered based on manuals and licenses that were purchased from the international managing agency. Within an Australian municipality, a family service agency obtains the license to operate the program after completing training and accreditation requirements. Trained facilitators then run the program in locations across a municipality.

Cost-effectiveness

Benefits minus cost: "$US 4,547 per participant = Costs $US -835, Benefits $US 5,381" (WSIPP, 2018, 7 included studies, 2 included for internalising Cox effect size post-intervention = - 0.129, first follow up = -0.094 – one thumb). Effects on depression and anxiety not reported.

Minority populations

Strengthening Families has been implemented successfully with a range of parents including: from low SES backgrounds; and people from culturally and linguistically diverse (CALD) backgrounds and nations. We found no reports of delivery for LGBTI people or Aboriginal and Torres Strait Islanders. As the program has

been run successfully with first nation Americans, it is likely to translate to Aboriginal and Torres Strait Islander people.

Resilient Families

Evaluation outcomes

http://whatworksforkids.org.au/program/the-resilient-families-program (promising)

https://positivechoices.org.au/teachers/resilient-families-program (3/3 stars - multiple studies showing benefits).

Buttigeig et al, (2015)[19] report selective effects in reducing depression one-year post intervention - in cases where adolescents had moderate baseline symptoms and families attended parent education events (Question mark).

Target audience

Universal program for secondary school students and parents

Reach

A broad range of parent demographics are relevant.

Referral pathways

All parents and students are offered the program within a school.

Components

Manualised (1) student curricula; (2) parent group programs.

"The following major components: Student Curriculum: The student curriculum covers communication skills, emotional awareness, conflict resolution, stress reduction, responsibilities in the family, and changes that occur in families. The curriculum component is a 10-week program, delivered to Year 7 students by their classroom teachers. Parenting Adolescents Quiz: This component is a 2-hour social evening for parents with Year 7/ Year 8 children. The evening uses a fun quiz format to impart research-based information to help parents promote healthy youth development. PACE (Parenting Adolescents: A Creative Experience): PACE is an 8-week parenting program that provides practical information on a range of issues facing young people and their families. Groups provide a safe and positive forum in which the strengths and experiences of parents can be shared and explored. Parent Education Book: Helping your child succeed in school and life is a simply written and engaging book that sets out the major issues parents face in raising children through the early secondary school period and the parenting strategies they can use to build family resilience." (WW4K, 2018).

Workforce requirements

The program is delivered by school staff following half day training courses.

Cost-effectiveness

Unknown.

Minority populations

The 1999 version of Resilient Families was implemented successfully with a range of parents from: low SES backgrounds, Aboriginal and Torres Strait Islander; and people from culturally and linguistically diverse (CALD) backgrounds and nations. We found no reports of delivery for LGBTI people.

Conflict of Interest Declaration: Author Toumbourou holds intellectual property responsibility for the Resilient Families program.

School interventions

1. FRIENDS for Life

Evaluation outcomes

Although this program is focussed on preventing anxiety, Brunwasser & Garber's (2016)[28] meta-analyses showed small significant effects in preventing depressive symptoms at 6 - 12 month follow-up (g = - 0.24, CI - 0.34 to -0.14, k = 3,) but not at post-intervention (g = -0.04, CI - 0.14 to 0.05, k = 4). There was significant heterogeneity between the studies. We were unable to source meta-analyses for effects on internalising or anxiety.

Target audience

Delivered universally to primary school students, with one study including pre-school children.

Reach

The program is relevant to students from diverse backgrounds. The evaluations have been in universal primary school populations in Australia.

Referral pathways

All students receive the universal program.

Components

Manualised curricula delivered to: (1) groups of children; and (2) parents.

This program "involves ten weeks of 1 to 1.5-hour sessions to be run in class time, and has corresponding homework tasks for each session so the skills can be practiced at home with families. Schools may choose to complete the program over a 10-week period, or choose to conduct shorter sessions over a longer period of time. At the conclusion, there is also the option to run two booster sessions via homework tasks, where the students can review their progress and re-visit the FRIENDS management plan .. [There are] two parent sessions that may be arranged by the school. In addition, handouts are provided to supply parents with further information. (www.kidsmatter.edu.au/primary/programs/friends-life/).

Workforce requirements

The programs are delivered by school staff after receiving training from the developers.

Cost-effectiveness

Unknown

Minority populations

Evaluations effects are unknown for participants: from low SES backgrounds; from culturally and linguistically diverse (CALD) backgrounds; with a physical disability; from Aboriginal and Torres Strait Islander backgrounds; or from LGBTI orientation.

2. Penn Resiliency Program (PRP)

Evaluation outcomes

Brunwasser & Garber (2016)[29] meta-analyses show small significant effects in preventing depressive symptoms at post-intervention (g = - 0.08, CI - 0.15 to - 0.01, k = 13) and at 6-30 month follow-up (g = - 0.19, CI - 0.27 to - 0.11, k = 12, 👍👍👍). Evaluation findings show high heterogeneity with two studies reporting negative effects. When delivered by external providers (in an effectiveness trial) rather than the research team, effects were non-significant at post-intervention (g = -0.06, CI -0.13 to 0.02, k = 7), but significant at first follow-up (g = - 0.15, CI - 0.23 to -0.07, k = 6). Effects on internalising and anxiety are unknown.

Target audience

Delivered universally to all students in late primary or secondary school or to universal, selected and indicated adolescent groups targeted in locations such as primary care clinics or ethnic community centres.

Reach

A broad range of child and family demographics are relevant. Evaluation trials include Australian children.

Referral pathways

All students receive the universal program or families with high depression symptom children may be referred by clinics.

Components

Manualised curricula delivered to groups of children. Group-implemented 12 session manualised curricula based on CBT.

Workforce requirements

The programs are delivered by the Penn State Resiliency Research team staff and students or by accredited mental health providers.

Cost-effectiveness

Unknown

Minority populations

PRP evaluations include participants from: low SES backgrounds; and from culturally and linguistically diverse (CALD) backgrounds.[29] We were unable to identify evaluations with: people with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

3. Coping with Stress Course

Evaluation outcomes

Brunwasser & Garber (2016)[29] meta-analyses show medium sized significant effects in preventing depressive symptoms at post-intervention (g = - 0.33, CI - 0.47 to - 0.20, k = 4) and small effects at 12-33 month follow-up (g = - 0.18, CI - 0.32 to - 0.04, k = 4) (👍👍👍). Evaluation findings show low heterogeneity. Similar effects have been found when delivered by external providers (in an effectiveness trial). Effects on internalising and anxiety are unknown.

Target audience

Delivered to selected secondary school age adolescents based on sub-clinical symptoms or targeted based on parents diagnosed with a depressive disorder in health care organisations (see details www.promisingpractices.net/program.asp?programid=151).

Reach

A broad range of child and family demographics are relevant. No evaluation trials in Australian children were identified.

Referral pathways

Students in the secondary school trial were recruited into a research study and then referred into the intervention based on assessment of sub-clinical depressive symptoms. In the health organisation trial adolescents were invited to participate based on referral from parents diagnosed with a depressive disorder.

Components:

Manualised curricula delivered to groups of children. Group-implemented 15 sessions each of 45–60 minute implemented from a manualised curricula based on CBT.

Workforce requirements

The programs are delivered by the research team staff and students or by accredited providers.

Cost-effectiveness

Unknown

Minority populations

The evaluations have not reported effects with participants from: low SES backgrounds; culturally and linguistically diverse (CALD) backgrounds; people with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

4. Promoting Alternative Thinking Strategies (PATHS)

Evaluation outcomes

http://whatworksforkids.org.au/program/promoting-alternative-thinking-strategies-paths (well supported)

https://www.blueprintsprograms.org/factsheet/promoting-alternative-thinking-strategies-paths (rated as a Model program)

http://www.wsipp.wa.gov/BenefitCost/Program/94 (WSIPP, 2018, 7 included in the meta-analysis for internalising Cox effect size post-intervention = -0.015, follow-up = 0.000,) (👍👍👍) Effects on anxiety and depression were not included in the meta-analysis.

Target audience:

Pre-school and primary school children, ages 3 to 11 (WW4K, 2018).

Reach

Universal reach, but is also delivered to selective "special need" students.

Referral pathways

All students attending school for the universal implementation. Referral for selective implementation is for students identified by the school as special needs.

Components

Manualised classroom delivered curricula.

"The Promoting Alternative Thinking Strategies (PATHS) curriculum is a classroom socioemotional learning program designed to improve self-control, emotional understanding, interpersonal relationships, and social problem-solving skills for [primary school students]. The program is designed to be a multi-year, school-

wide intervention to prevent serious emotional and behavioral problems. The PATHS curriculum provides scripts to guide lessons that classroom teachers or counselors teach two to three times a week."

"Each grade level undertakes different components using an overall scope and sequence. New developmental topics are added each year to a basic curriculum model that is focused on emotional awareness, self-control, interpersonal problem solving, empathy development, and healthy peer relationships. Implemented two or three times per week. Each session is designed to last approximately 30 minutes" (WW4K, 2018).

Workforce requirements

Classroom teachers deliver the curricula following a "2-3-day training workshop and ... bi-weekly or monthly consultation and observation from project staff as they deliver the PATHS curriculum to their students" (WW4K, 2018). The curricula is delivered based on manuals that are purchased from the developer.

Cost-effectiveness

Benefits minus cost = "$US 7,127 per participant = Costs $US -360, Benefits $US 7,487 " (WSIPP, 2018, 11 included studies, 7 included for internalising Cox effect size post-intervention = -0.015, follow-up = 0.000. Effects on anxiety and depression were not included in the meta-analysis.

Minority populations

PATHS has been implemented successfully in the USA with students from low SES backgrounds, special learning need students, and students with a physical disability. There is no information on the implementation with: Aboriginal and Torres Strait Islander; people from culturally and linguistically diverse (CALD) backgrounds; or LGBTI people.

5. Blues Program/ Blues (Peer) Group

Evaluation outcomes

Brunwasser & Garber (2016) meta-analyses show significant medium effects in preventing depressive symptoms at post-intervention (g = - 0.45, CI - 0.63 to -0.28, k = 3) and small significant effects at 6-24 month follow-up (g = - 0.21, CI - 0.38 to -0.03, k = 3). There was low heterogeneity between the studies. There is also evidence that the intervention reduced depressive disorder after 6-month (OR = 0.12) and 24-months (OR = 0.53). One trial found significant effects (effectiveness evidence) where the curricula was implemented by school staff.

http://wsipp.wa.gov/BenefitCost/Program/537 (WSIPP, 2018, 4 included studies for major depressive disorder Cox effect size post-intervention = -0.201, (👍👍👍), first follow-up = 0.000). Effects on anxiety and internalising are unknown.

Target audience

Selected adolescents with sub-clinical depressive symptoms.

Reach

Relevant to secondary school students from diverse backgrounds. No evaluations have been reported with Australian youth.

Referral pathways

Students with high (sub-clinical) depressive symptoms are referred into the groups by researchers.

Components:

Manualised curricula delivered to groups of adolescents. The program consists of six weekly one-hour group sessions and home practice assignments. Sessions focus on engaging in pleasant activities, cognitive

restructuring techniques, and response plans for future life stressors... In the studies we reviewed, there was an average of 6.85 students per group with an average of 73 students served by each teaching team" (WSIPP, 2018).

Workforce requirements

"The program was team-taught by either a graduate student and undergraduate assistant or two school personnel (typically a school counselor or school nurse). Program leaders received an average of ten hours of training" (WSIPP, 2018).

Cost-effectiveness

Benefits minus cost = "$US -144 per participant = Costs $US -116, Benefits $US -28 " (WSIPP, 2018). The low benefits are associated with an estimated small economic return from preventing major depression and hence should be interpreted cautiously.

Minority populations

We were not able to find evaluations that included participants from: low SES schools; culturally and linguistically diverse (CALD) backgrounds; with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

6. CBT Bibliotherapy (Evaluation of self-help using the Feeling Good handbook)

Evaluation outcomes

Brunwasser & Garber (2016) meta-analyses show significant effects in preventing depressive symptoms at post-intervention (g = - 0.18, CI - 0.36 to 0.002, k = 3) and at 6-24-month follow-up (g = - 0.25, CI - 0.43 to -0.07, k = 3) (). There was low heterogeneity between the studies. The trials demonstrated effectiveness as youth were offered minimal guidance from the research team. Effects on anxiety and internalising are unknown.

Target audience

Selected adolescents with sub-clinical depressive symptoms.

Reach

Relevant to secondary school students from diverse backgrounds. No evaluations have been reported with Australian youth.

Referral pathways

Students with high (sub-clinical) depressive symptoms were referred to the books by researchers.

Components:

Self-help book recommended to adolescents. The self-help "Feeling Good Handbook" (Burns, 1989) was provided to adolescents. This book is based on CBT and offers guidance on changing cognitions and managing emotions.

Workforce requirements

Students were given minimal guidance or support in how to use the book.

Cost-effectiveness

Not available.

Minority populations

We were not able to find evaluations that included participants from: low SES schools; culturally and linguistically diverse (CALD) backgrounds; with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

7. Interpersonal Psychotherapy-Adolescents Skills Training

Evaluation outcomes

Brunwasser & Garber (2016) meta-analyses show significant medium effects in preventing depressive symptoms at post-intervention (g = - 0.49, CI - 0.71 to -0.28, k = 3) and small significant effects at 3-18-month follow-up (g = - 0.24, CI - 0.46 to -0.01, k = 3) (👍👍). There was significant heterogeneity between the studies. There is evidence in one evaluation that the intervention reduced depressive disorder after 6-months. One trial found significant effects (effectiveness evidence) where the curricula was implemented by trained group leaders. We did not find meta-analyses for effects on anxiety and internalising.

Target audience

Universal school program with indicated component for adolescents with sub-clinical depressive symptoms.

Reach

Relevant to secondary school students from diverse backgrounds. No evaluations have been reported with Australian youth.

Referral pathways

All students in a school receive the universal curricula. Students with high (sub-clinical) depressive symptoms are referred into the groups by researchers.

Components

Manualised curricula delivered to groups of adolescents.

"The program includes two individual pre-group sessions followed by eight group sessions with 3-7 adolescents per group. It may also include a mid-program session that parents are allowed to attend and four individual booster sessions in the months following the group sessions. ... The program aims to decrease depressive symptoms by helping adolescents improve their relationships and interpersonal interactions. The group teaches adolescents communication strategies and interpersonal problem-solving skills that they can apply to their relationships".

(www.blueprintsprograms.org/factsheet/interpersonal-psychotherapy-adolescent-skills-training)

Workforce requirements

The universal program is implemented by the teacher following training from the researchers. The indicated program "is delivered by mental health clinicians at school" (www.blueprintsprograms.org/factsheet/interpersonal-psychotherapy-adolescent-skills-training).

Cost-effectiveness

Information was not identified.

Minority populations

Evaluations were not found with students: from low SES schools; from culturally and linguistically diverse backgrounds; with a physical disability; from Aboriginal and Torres Strait Islander backgrounds; or with an LGBTI orientation.

8. Problem Solving for Life

Evaluation outcomes

Brunwasser & Garber (2016) meta-analyses show small significant effects in preventing depressive symptoms at post-intervention (g = - 0.19, CI - 0.28 to - 0.11, k = 2, One thumb) and non-significant effects at 12-33 month follow-up (g = 0.03, CI - 0.06 to - 0.12, k = 2). There were no effects on depressive disorders. The programs were delivered by teachers and hence represent an effectiveness trial. We were unable to source meta-analyses for effects on internalising or anxiety.

Target audience

Delivered by teachers as a universal secondary school program and in an indicated format with groups selected by the researchers to have high sub-clinical depression symptoms.

Reach

A broad range of child and family demographics are relevant. Evaluation trials have been in Australian schools.

REFERRAL pathways

All students in the school receive the universal intervention. Students were recruited into a research study and then referred into the indicated intervention based on assessment of sub-clinical depressive symptoms.

Components

Manualised curricula delivered to groups of children

Eight manualised sessions lasting approximately 45 minutes delivered by classroom teachers who have received training from the researchers. The curriculum teaches CBT techniques including problem solving (www.childtrends.org/programs/problem-solving-for-life).

Workforce requirements

The programs are delivered by classroom teachers who have received training from the researchers.

Cost-effectiveness

Unknown

Minority populations

The evaluations have not reported effects with participants from: low SES backgrounds; culturally and linguistically diverse (CALD) backgrounds; people with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

9. Acceptance and Commitment Therapy (ACT)

Evaluation outcomes

http://wsipp.wa.gov/BenefitCost/Program/757 (for children with depression - adolescent groups to treat depression) (Major depressive disorder medium significant effect - Cox effect size post-intervention = -0.281, first follow-up = 0.000, k = 2, One thumb).

http://wsipp.wa.gov/BenefitCost/Program/756 (for children with high anxiety) (Anxiety disorder large significant effect - Cox effect size post-intervention = -0.450, first follow-up = 0.208, k = 1).

Target audience

Indicated adolescents with elevated symptoms of depression or anxiety

Referral pathways

Adolescents are referred by health or mental health services.

Components:

Manualised curricula.

"Acceptance and Commitment Therapy (ACT) for depression aims to increase client acceptance of negative thoughts and feelings and to reduce the negative behavioral impact of depression. Acceptance and Commitment Therapy relies on six core processes of change: 1) acceptance; 2) learning to view thoughts as hypotheses rather than facts, 3) being present, 4) viewing the self as context for experience, 5) identifying core values, and 6) acting based on those values. These core principles are applied through various exercises and through homework. In the two studies included in this analysis, ACT was delivered either in 10 group or 20 individual sessions." (WSIPP, 2018).

Workforce requirements

Experienced mental health professionals

Cost-effectiveness

Benefits minus cost for depression = "$US -755 per participant (negative return) = Costs $US -598, Benefits $US -157 (negative benefits)" (WSIPP, 2018, Program/757, 2 studies). For anxiety benefits minus cost: "$US 6,901 per participant = Costs $US 367 (profitable program for Washington State agencies based on health system returns for treating child anxiety), Benefits $US 6,534" (WSIPP, 2018, Program/756, 1 included study).

Minority populations

Effects are unknown for youth: from low SES backgrounds; with a physical disability; from Aboriginal and Torres Strait Islander backgrounds; from culturally and linguistically diverse backgrounds; that identify as LGBTI.

10. Aussie Optimism Program

Evaluation outcomes

Brunwasser & Garber (2016) meta-analyses show non-significant effects in preventing depressive symptoms at post-intervention (g = - 0.09, CI - 0.19 to 0.01, k = 3) or at 9 month follow-up (g = - 0.03, CI - 0.13 to 0.08, k = 3, Question mark). There is some heterogeneity between the studies. Two of the trials were effectiveness trials where the curricula was implemented by school teachers.

Target audience

Delivered universally to late primary or early secondary school students.

Reach

The evaluations have been in disadvantaged Australian schools.

Referral pathways

All students receive the universal program.

Components

Manualised curricula delivered to groups of children.

Group-implemented 12 sessions each of 45-60 minutes implemented from a manualised curricula based on CBT and interpersonal skills.

Workforce requirements

The programs are delivered by teachers after receiving training from the developers.

Cost-effectiveness

Unknown

Minority populations

Evaluations include participants from: low SES schools. Effects are unknown for participants from; culturally and linguistically diverse (CALD) backgrounds; with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

11. Resourceful Adolescent Program

Evaluation outcomes

http://whatworksforkids.org.au/program/resourceful-adolescent-programs-rap-a-rap-p-rap-t (Supported)

Brunwasser & Garber (2016) meta-analyses show non-significant effects in preventing depressive symptoms at post-intervention (g = - 0.05, CI - 0.25 to 0.15, k = 2) or at 6 - 12-month follow-up (g = 0.12, CI - 0.004 to 0.25, k = 3). There is significant heterogeneity between the studies.

Target audience

Delivered universally to early secondary school students.

Reach

The program is relevant to students from diverse backgrounds. The evaluations have been in universal secondary school populations in Australia, the UK and Mauritius. The program is relevant to students from diverse backgrounds.

Referral pathways

All students receive the universal program.

Components

Manualised curricula delivered to: (1) groups of children; (2) parents; and (3) as training for teachers.

In the traditional student curricula there are eleven group sessions, conducted weekly for between 40 and 50 minutes during school class time, with one facilitator per group. The recommended group size is 15 participants, although many schools run it in regular class groups. ... [has] also been run in a camp format" ... "There appears to be no additional benefits of adding the parent component to the adolescent component with regard to quantifiable impact on depressive symptoms" (WW4K, 2018).

Workforce requirements

The programs are delivered by school staff after receiving a training manual from the developers.

Cost-effectiveness
Unknown

Minority populations
Evaluations have included schools from culturally and linguistically diverse (CALD) backgrounds. Effects are unknown for participants from: low SES schools; with a physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

12. Physical activity interventions

Evaluation outcomes
Stockings et al (2016)[48] reported physical activity interventions had medium to large sized significant effects at post-intervention for internalising (RR = 0.39, CI 0.26 to 0.59, k = 9, N = 5115); anxiety (Relative Risk [RR] = 0.25, CI = 0.10 to 0.65, k=3, N=2023); and depression (RR = 0.41, CI 0.24 – 0.69, k = 9, N = 5115). Smaller significant effects were maintained at 6-9 month follow-up for internalising (RR = 0.47, CI = 0.37 to 0.60, k = 10, N = 1915); and depression (RR = 0.45, CI 0.35–0.58, k = 10, N = 1915); but were not significant for anxiety (RR = 1.10, CI = 0.45 – 2.51, k = 2, N = 1046). Effects were non-significant at 12 month follow-up for internalising, anxiety or depression.

Brown et al, (2013)[48] included nine studies (n = 581), that were mostly randomised individuals in schools and meta-analysis found a small protective effect in reducing depressive symptoms (Hedges' g = -0.26,p = .004).

Despite there being a sufficient number of studies to warrant a higher rating, we downgraded our rating to 2 thumbs due to a lack of clarity as to which physical activity program should be implemented.

Target audience
Universal – all children in a school. Selected – students with elevated depression symptoms.

Reach
A broad range of child demographics are relevant.

Referral pathways
Universal – all children in a school. Selected – students with elevated depression symptoms

Components
Manualised curricula. Evaluations have been completed by researchers using published intervention protocols.

Workforce requirements
Universal programs have been implemented by researchers and teachers.

Cost-effectiveness
Unknown.

Minority populations
We found no reports of delivery to: people: from low SES backgrounds, Aboriginal and Torres Strait Islander; from culturally and linguistically diverse (CALD) backgrounds; or LGBTI people.

13. Bullying Prevention Programs

Evaluation outcomes

http://whatworksforkids.org.au/program/olweus-bullying-prevention-program (Olweus - Promising, Question Mark)

https://www.blueprintsprograms.org/factsheet/olweus-bullying-prevention-program. "Reductions in self-reported bullying are mixed across multiple evaluations, but generally positive. Reductions in self-reported victimization are mixed across multiple evaluations. Decreases in other forms of delinquency and anti-social behavior, such as theft, vandalism and truancy found in the original Norway study and South Carolina replication. Improvements in positive social relationships and school climate found in Norway study. In Pennsylvania, improvements in all 14 bullying outcomes, including a 13% decrease in the likelihood of being bullied and a 29% decrease in the likelihood of bullying others" (Blue prints, 2018).

Although bullying prevention programs show positive effects in reducing bullying and antisocial behaviours, we were unable to identify studies that have found positive effects on child or adolescent mental health.

Target audience

Universal primary and secondary school program, 6 -17 years olds (WW4K, 2018).

Referral pathways

All students attending school.

Components

Manualised school training curricula and policies.

"The goals of the OBPP are to reduce existing bullying among students, prevent new bullying problems, and achieve better peer relations. These goals are pursued by restructuring the school environment to reduce opportunities and rewards for bullying, encouraging pro-social behaviours, and building a sense of community. The OBPP is designed for students in elementary, middle, and high schools and involves all staff, students, parents, and the community in bullying prevention efforts. All students participate in most aspects of the program, while students who bully others and students who are bullied receive additional individualised interventions" (WW4K, 2018).

Workforce requirements

Implemented by school leaders and staff with advice from the developer.

Cost-effectiveness

Unknown

Minority populations

Effects on minorities is unknow.

14. Good Behaviour Game

Evaluation outcomes

http://www.wsipp.wa.gov/BenefitCost/Program/82. WSIPP (2018) meta-analysis showed small effects in preventing anxiety disorder (Cox effect size post-intervention = – 0.089 and first follow-up – 0.041, k =3) and major depression disorder (Cox effect size post-intervention = – 0.118 and first follow-up – 0.000, k =3) (👍👍).

Target audience

Delivered to universal primary school age students.

Reach

A broad range of child and family demographics are relevant. Although no evaluation trials have been published with Australian students, we are aware an Australian pilot is in process.

Referral pathways

All students in primary school participate in the program.

Components

Manualised teacher curricula

"A classroom behavior management game providing a strategy to help elementary teachers reduce aggressive, disruptive behavior and other behavioral problems in children, particularly highly aggressive children, while creating a positive and effective learning environment" ... "In GBG classrooms, the teacher assigns all children to teams, balanced with regard to gender; aggressive, disruptive behavior; and shy, socially isolated behavior. Basic classroom rules of student behavior are posted and reviewed. When GBG is played, each team is rewarded if team members commit a total of four or fewer infractions of the classroom rules during game periods". (www.blueprintsprograms.org/factsheet/good-behavior-game).

"The Good Behavior Game is a two-year classroom management strategy designed to improve aggressive/disruptive classroom behavior .... After teachers establish shared behavior expectations in their classroom, teams of students play the game throughout the day and may receive rewards by minimizing negative behaviors. The program is universal and can be applied to general populations of early elementary school children (1st and 2nd grades)" (WSIPP, 2018).

Workforce requirements

The program is delivered by teachers following training from the program developer.

Cost-effectiveness

Benefits minus costs $USD 10,850 per participant = Benefits $11,002 – Costs $153.

Minority populations

The evaluations have reported effects with participants from: low SES backgrounds; culturally and linguistically diverse backgrounds; people with a physical disability. We were unable to identify evaluations with; Aboriginal and Torres Strait Islander people; or LGBTI people.

Community interventions

1. Communities for Children

Evaluation outcomes

The most recent national evaluation of Communities for Children (Edwards et al, 2011)[57] shows that the program has been associated with increased delivery of evidence-informed services and positive impacts in three areas: fewer children were living in a jobless household; parents reported less hostile or harsh parenting practices; and parents felt more effective in their roles as parents. Negative effects were observed in parent reports of children's physical functioning. The effects on child internalising, anxiety or depression are unknown (Question mark).

Target audience

Service delivery plans are implemented in selective geographic target areas identified with high socioeconomic disadvantage

Referral pathways

Children within a geographic area are exposed to collective efforts to improve service delivery practices.

Components

Policies and funding guidelines delivered to community coalitions. Communities for Children is a community coalition model that seeks to improve service delivery within a socioeconomic disadvantaged geographic area by using funding incentives and training to encourage services to adopt evidence-based service models. "The programme is designed to ensure resources are invested strategically over time and supported by evidence-based practices in disadvantaged communities. Whole community approaches support and enhance early childhood development and wellbeing from birth to 12 years". An "Expert Panel have provided guidelines and an industry listing of evidence-based programmes that the panel recommends based on evaluation evidence and assessed suitability...
(https://apps.alfs.gov.au/cfca/guidebook/programs)." (Toumbourou et al, 2017).[58]

Workforce requirements

The program is implemented by community coordinators that receive training and assistance from the Australian Institute for Families.

Cost-effectiveness

Pezzullo et al. (2010)[58] estimated the program returned $4.77 for every $1 spent.

Minority populations

The program is designed to be suitable for vulnerable families including participants from: low SES backgrounds; culturally and linguistically diverse backgrounds; with a physical disability; from Aboriginal and Torres Strait Islander backgrounds; or identifying as LGBTI people.

2. Communities That Care

Evaluation outcomes

http://whatworksforkids.org.au/program/communities-that-care (Supported – Question mark for internalising)

http://www.wsipp.wa.gov/BenefitCost/Program/115 (WSIPP, 2018: This model has evidence for increasing the implementation of effective prevention programs resulting in preventive effects for crime and substance use and increased school completioare unknown for internalising problems, anxiety or depression.)

https://www.blueprintsprograms.org/factsheet/communities-that-care (4/5 stars, promising program).

Target audience

Universal effects on children and adolescents across a geographic target area.

Reach

Relevant to all children and adolescents across a geographic target area. An Australian evaluation is in process.

Referral pathways

Children and adolescents within a geographic area are likely to benefit.

Components

Manualised curricula delivered to community coalitions.

"Communities That Care (CTC) is a process designed to enhance the healthy development of children and young people. CTC builds community capacity to plan and deliver effective developmental prevention services that are evidence-based and respond to local needs. CTC uses a public health approach to decrease the prevalence of youth-related problems such as substance abuse, violence, mental illness, school failure and antisocial behaviour. Through the training provided, communities develop the skills to identify and

minimise the risk factors for these health and behaviour outcomes, whilst simultaneously promoting protective factors, to improve well-being for young people in the community. Communities undertaking the CTC process are provided with extensive training and technical assistance to guide them through five phases of planning and delivery" (WW4K, 2018).

Workforce requirements

The program is implemented by community coordinators that receive training and assistance from the Communities That Care staff.

Cost-effectiveness

Benefits minus cost = "$US 2,555 per participant = Benefits $US 3,148 - Costs $US 593" (WSIPP, 2018). Program benefits are calculated from positive effects in preventing tobacco use, and crime and increasing school completion.

Minority populations

Evaluations include participants from: low SES schools; culturally and linguistically diverse backgrounds. We were not able to find evaluations with participants: with physical disability; Aboriginal and Torres Strait Islander people; or LGBTI people.

Conflict of Interest Declaration: Authors Toumbourou and Reavley are Directors and Rowland is the Chief Executive Officer of Communities That Care Ltd.

3. Mentoring: Community-based for children with disruptive behaviour disorders

Evaluation outcomes

http://www.wsipp.wa.gov/BenefitCost/Program/819. WSIPP (2018) meta-analysis showed very large effects in preventing internalising symptoms (Cox effect size post-intervention = – 0.746 and first follow-up – 0.544, k = 2, One thumb).

Target audience

Delivered to selected children diagnosed with disruptive behaviour disorders.

Reach

This is a program with a selective reach. Variants of mentoring are used in Australia.

Referral pathways

Delivered to selected children diagnosed with disruptive behaviour disorders.

Components

Manualised curricula for mentors

"In community-based mentoring programs for children with disruptive behavior disorders, paraprofessional mentors are paired with youth with diagnosed disruptive behavior disorders. These youth are referred to mentoring by their mental health care providers. Among studies included in this analysis, youth were 8 to 12 years old. On average, mentors met with their mentees for three to four hours each week over a period of eight weeks. Mentors engage in developmentally appropriate activities (e.g. playing games, sports) and promote and reinforce positive behaviors and goals (e.g. social skills, communication, affect regulation). Mentors debrief parents at the end of each visit and discuss activities, behavior, and goal progression. Paraprofessional mentors receive training on program guidelines, discipline strategies, structured activities, and mentor-parent interactions and receive regular supervision." (WSIPP, 2018).

Workforce requirements

The program is delivered by paraprofessionals mentors who receive training on program guidelines, discipline strategies, structured activities, and mentor-parent interactions and receive regular supervision" (WSIPP, 2018).

Cost-effectiveness

Benefits minus costs $USD 4,085_per participant = Benefits $5,727 – Costs $1,641.

Minority populations

The evaluations have reported effects with participants from: low SES backgrounds; culturally and linguistically diverse backgrounds; people with a physical disability. We were unable to identify evaluations with; Aboriginal and Torres Strait Islander people; or LGBTI people.

4. Online cognitive behavioural therapy

Evaluation outcomes

http://wsipp.wa.gov/BenefitCost/Program/64 (WSIPP, 2018) Cox effect size five studies Anxiety disorders post-intervention = -0.439, first follow-up = -0.203, K = 5. Major depression post-intervention and first follow-up = 0.000, k = 1. Internalising effects unknown. Although there are effects in more than four evaluations, we downgraded our rating to 2 thumbs as the evaluations are not yet clear as to the specific programs that have positive effects (👍👍).

Target audience

Children with high anxiety symptoms

Reach

A broad range of child and family demographics are relevant.

Referral pathways

Parents may self-refer or be referred by organisations.

Components

Manualised curricula delivered online

"These treatments utilise the same principles and techniques as those of other Cognitive Behaviour Therapy (CBT) treatments for anxiety (e.g. strategies to control physiological responses to anxiety, cognitive restructuring and self-talk, exposure to feared stimuli, and positive reinforcement). However, they are unique insofar as clients have reduced (if any) face-to-face time with therapists. Clients are supported remotely via email or phone contact. A manual or online program helps to guide progress of the intervention." (WSIPP, 2018).

Three examples of online programs include:

- Camp Cope A lot. Available from Professor Kendall (www.workbookpublishing.com/information.php?info_id=5)
- Cool Teens: Available from Professor Ron Rapee https://www.ncbi.nlm.nih.gov/pubmed/18563472
- Brave Online: Available from Professor Sue Spence. https://www.kidsmatter.edu.au/health-and-community/enewsletter/brave-online-program-susan-spence https://brave4you.psy.uq.edu.au/

Workforce requirements

Online programs are hosted by a variety of health and mental health organisations.

Cost-effectiveness

Benefits minus cost = "$US 7,599 per participant = Costs $US 791 (profitable program for Washington State agencies based on health system returns for treating child anxiety), Benefits $US 6,808"

Minority populations

We were unable to find information on the implementation with: low SES backgrounds; physical disability; Aboriginal and Torres Strait Islander; people from culturally and linguistically diverse (CALD) backgrounds; LGBTI people.

Royal Commission into
Victoria's Mental Health System

ATTACHMENT GH-3

This is the attachment marked 'GH-3' referred to in the witness statement of Georgina Harman dated 1 July 2019.

Examples of programs for children and parents

- **Exploring Together** – This is a short-term, multi-group, early intervention program for children at risk of developing serious emotional and behavioural problems, their parents/carers and teachers. It targets children between 6 and 14 years of age. The program focuses on developing children's social skills and reducing their problematic behaviour, enhancing parenting practices, and strengthening family units. For more information, see: www.exploringtogether.com.au and http://whatworksforkids.org.au/program/exploring-together-primary-school-program.
- **Families and Schools Together** – This is a multi-family after school program intended to increase parents' involvement in school and their child's education, increase parent-child bonding and communication, and enhance parents' self-efficacy. Groups of 8 to 12 families meet weekly for eight consecutive weeks. Sessions last about 2½ hours and take place after school or early in the evening. Trained facilitators conduct the meetings, which involve experiential learning, parent-child play, and a shared meal. The initial eight weeks are followed by two years of monthly parent-led meetings. For more information see: http://whatworksforkids.org.au/program/families-and-schools-together-fast-0.
- **Triple P** – This is a universal prevention program that aims to increase the skills and confidence of parents to prevent the development of serious behavioural and emotional problems in their children. Triple P has five levels of intensity. The first level is a media campaign to increase awareness of parenting resources and inform parents about solutions to common behavioural problems. Levels two and three are primary health care interventions for children with mild behavioural difficulties, whereas levels four and five are more intensive individual or class-based parenting programs for families of children with more challenging behaviour problems. For more information see: www.triplep-parenting.net.au and http://whatworksforkids.org.au/program/triple-p-positive-parenting-program.
- **Strengthening Families Program** (SFP) – This is a nationally and internationally recognised parenting and family strengthening program for high-risk and regular families with different age versions from birth to 17 years of age. SFP is an evidence-based family skills training program of 7 to 14 sessions depending on the risk level of the family. SFP has been found to significantly reduce problem behaviours, delinquency, and alcohol and drug abuse in children and to improve social competencies and school performance. Child maltreatment also decreases as parents strengthen bonds with their children and learn more positive parenting. For more information see: https://strengtheningfamiliesprogram.org/ and http://whatworksforkids.org.au/program/strengthening-families-program.
- **Resilient Families** – This is a school-based prevention program designed to help students and parents develop knowledge, skills and support networks that promote health, wellbeing and education during the early years of secondary school. Evaluations have recommended the program be implemented for primary school. The program is designed to increase family connectedness as well as improve social support between different families and between families and schools. The program is designed to promote social, emotional and academic competence and to prevent health and social problems in young people. For more information, see: http://whatworksforkids.org.au/program/the-resilient-families-program.
- **Coping Cat** – This is a cognitive-behavioural treatment for children with anxiety. It includes four components – recognising and understanding emotional and physical reactions to anxiety; clarifying thoughts and feelings in anxious situations; developing plans for effective coping; and evaluating performance and giving self-reinforcement. For more information see: http://www.cebc4cw.org/program/coping-cat/.

Royal Commission into
Victoria's Mental Health System

ATTACHMENT GH-4

This is the attachment marked 'GH-4' referred to in the witness statement of Georgina Harman dated 1 July 2019.

www.childhoodadversity.org.au

Childhood Adversity and Mental Health

The Centre of Research Excellence in Childhood Adversity and Mental Health is a five-year research program (2019-2023) co-funded by the National Health and Medical Research Council (NHMRC) and Beyond Blue.

Our vision is to create a sustainable service approach, co-designed with end-users, to improve children's mental health by early detection and response to family adversity.

Why Childhood Adversity and Mental Health?

The prevalence of anxiety disorders and depression in Australian children and youth has not reduced, despite increased use of services and medications for these conditions.

This could be due to inadequate identification and treatment of early risk factors for anxiety disorders and depression. Children who experience challenges or adversities as they grow are 6 to 10 times more likely to develop mental health problems later in life. These adversities or adverse childhood experiences (ACEs) include physical, emotional and sexual abuse or neglect, bullying, parent mental health problems, harsh parenting, parent substance abuse and housing problems. Targeting interventions to reduce these risk factors during the early childhood years could help to improve the mental health and wellbeing of Australian children and the adults they will become.

However, despite substantial evidence demonstrating the benefit of investing in the early years of life, interventions targeting the precursors of mental health disorders – i.e. children's emotional and behavioral problems – do not always reach families most in need. Furthermore, there is a lack of integrated health, education and social services to support Australian children and families facing adversity.

What are we aiming to do?

We aim to tackle this problem by creating a sustainable service approach, co-designed with end-users, to improve children's mental health by early detection and response to family adversity.

To achieve this vision, we will first review the evidence around what interventions are most effective for reducing the negative effects of adversity on children's mental health and wellbeing. Based on this evidence, we also aim to work in partnership with two communities to co-develop and deliver community-based programs that address childhood adversity. This research will be led by a multidisciplinary team of experts in paediatrics, psychology, education, psychiatry and parenting as well as front line service providers and people with lived experience of childhood adversity and mental health problems. The work of the Centre has been organised into the following three themes:

- Theme A: Reviewing the evidence
- Theme B: Co-design and testing service approaches
- Theme C: Policy and implementation.

Childhood Adversity and Mental Health

Theme A - Reviewing the evidence

Led by Professor Tony Jorm of the University of Melbourne, Theme A aims to review the current evidence on strategies to prevent and respond to childhood adversity and associated depression, anxiety disorders and suicidality through a series of systematic literature reviews and meta-analyses. After reviewing the evidence, we will convene a panel of experts, including people with lived experience and experts from education, social and health service sectors, to participate in a Delphi expert consensus study. The Delphi study will enable us to determine what interventions will be the most appropriate for reducing the negative impacts of adversities on children's mental health, in real life settings. We will also include health economic analyses to understand which interventions represent the best value.

Theme B - Co-design and testing service approaches

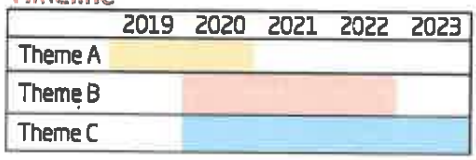
Led by Professor Harriet Hiscock, Theme B aims to co-develop, with end-users, systems-based approaches that identify and respond to childhood adversity from before birth and into primary school years (0-8 years). The evidence generated from Theme A will inform the design of two intervention service approaches that will be piloted in Wyndham in Victoria and Marrickville in New South Wales. One approach will be tested in community health centres for families of children aged 0-5 years and the second will be tested in primary schools for families of children from 5-8 years. At each site, there will be a range of co-located and integrated health, education and social services. These services will work in partnership with the community to better identify, engage and support families to lessen the effects of adversity on their children. In doing so, we hope to optimize the mental health of their children.

As we pilot the interventions and systems approaches in our sites, we will evaluate their feasibility, acceptability and how well they work at reducing children's behavioural and emotional problems. We will also measure the impact of these approaches on other outcomes such as parenting, parent mental health, and costs to the healthcare systems and society.

Theme C - Policy and implementation

Led by Professor Sharon Goldfeld, Theme C aims to develop a knowledge translation framework that specifically focuses on taking the learnings from Theme A and purposefully and iteratively considers how they can be translated into practice in the programs of Theme B to promote best uptake. We will also investigate how successful integrated models can be scaled up through government and other funding sources across each Australian jurisdiction.

Timeline



Royal Commission into
Victoria's Mental Health System

ATTACHMENT GH-5

This is the attachment marked 'GH-5' referred to in the witness statement of Georgina Harman dated 1 July 2019.

Targeted Call for Research to explore ways to prevent depression, anxiety and suicide among elderly Australians

1. **Translating evidence-based psychological interventions for older adults with depression and anxiety into public and private mental health settings using a stepped-care framework**

   This project evaluates the feasibility of delivering evidence-based programs within existing services representing public (urban, regional) and private organisations. It will examine effectiveness and cost-effectiveness of these stepped psychological interventions compared to treatment as usual. The results of this study will inform the translation of evidence-based stepped-care models of psychological interventions for anxiety and depression in older adults into the Australian mental health system.

   Grant duration: 4 years

   Chief Investigator A: Associate Professor Viviana Wuthrich

   Administering Institution: Macquarie University

   Participating Institutions: University of New South Wales, Amsterdam Institute for Global Health and Development

2. **The impact of befriending on depression, anxiety, social support and loneliness in older adults living in residential aged care facilities**

   The project will increase understanding of the impact of befriending people living in residential care and delivering training to staff and volunteers working in aged care. It will test the effectiveness of befriending or non-directive emotional and social support for relieving depression symptoms experienced by older adults living in residential aged care facilities despite some evidence for its effectiveness in other settings. An economic evaluation will also examine the costs and benefits of the program.

   Grant duration: 5 years

   Chief Investigator A: Professor Colleen Doyle

   Administering Institution: National Ageing Research Institute

3. **ELders AT Ease Program (ELATE): A cluster randomized controlled trial of a sustainable and scalable mental health service for Australian residential aged care facilities**

The ELATE program draws upon the best available research evidence and clinical expertise on treating psychological morbidity in older adults, this program uses an integrated care approach, in which counsellors, staff, and family carers collaborate to provide tailored, systemic, and evidence-based psychological interventions to residents living with symptoms of depression, anxiety or suicide ideation. The project will evaluate the clinical and health economic impact of this innovative model of service on depression and associated psychological comorbidity in older people living in residential aged care facilities and their family carers.

Grant duration: 4 years

Chief Investigator A: Associate Professor Sunil Bhar

Administering Institution: Swinburne University of Technology

Participating Institutions: Australian Catholic University, University of South Australia

4. **Evidence for suicide prevention in planning transitions from employment to retirement in older age populations**

This study will investigate the impact of changes in employment status in older aged Australians on subsequent risk of suicide and attempted suicide, and the extent to which this risk is modified by mental health service use and other social supports. Suicide remains a significant public health problem in Australia, and an emerging problem in older age cohorts. Change in employment status and transition to retirement from the labour force in those in older-age cohorts has been associated with change in mental health status and increased risk of suicidal behaviour.

Grant duration: 2 years

Chief Investigator A: Professor Andrew Page

Administering Institution: University of Western Sydney

Participating Institutions: University of Melbourne

5. **BAN-Dep: A trial to decrease the prevalence of depression in Australian nursing homes**

Depression is common among residents of aged care facilities, although symptoms are often not detected or treated. The Professional Education to Aged

Care (PEAC) is an e-learning platform designed to enhance knowledge about depression and anxiety in residential care. The trial tests whether the addition of a behavioural activation component is more efficacious than the PEAC alone in reducing the frequency of depressive symptoms in nursing home residents.

Grant duration: 3 years

Chief Investigator A: Professor Osvaldo Almeida

Administering Institution: University of Western Australia

Participating Institutions: University of Melbourne, Melbourne Health Aged Care, University of York (UK)

6. **A randomized controlled trial of an online peer support intervention for reducing symptoms of depression among community-dwelling older adults living in rural Australia**

Social connectedness is crucial to maintaining mental health. Contact with peers is more positively related to the wellbeing of older people than contact with family members. However, peer relationships with others who are experiencing similar life situations tend to reduce in older age. Those living in rural areas are disproportionately affected. Finding a mechanism to support geographically isolated older people to be socially connected is vital. Web-based technology offers an accessible, sustainable and feasible approach to enhancing opportunities for social interaction. This randomised controlled trial (RCT) will test the effectiveness of a web-based peer support intervention for reducing the symptoms of depression among older adults at 6 months follow-up. The impact on secondary outcomes including anxiety, loneliness, quality of life and cost will be assessed.

Grant duration: 3 years

Chief Investigator A: Professor Robert Sanson-Fisher

Administering Institution: The University of Newcastle

Participating Institutions: Hunter Medical Research Institute, Integrated living Australia

7. **Improving mental health and social participation outcomes in older adults with depression and anxiety**

This project aims to evaluate the incremental efficacy and cost-effectiveness of a newly enhanced CBT plus social participation program against our standard transdiagnostic CBT program for depressed and anxious older adults. Outcomes will provide evidence for a powerful psycho-social treatment for older adults suffering anxiety and/or depression, which is supported by structured manuals enabling reliable dissemination. This will provide therapists in the private and public health systems, a clear means to reduce the impact of poor emotional health in older age and reduce its economic burden, while providing Beyond Blue the ability to disseminate the most up-to-date scientific evidence.

Grant duration: 3 years

Chief Investigator A: Professor Ronald Rapee

Administering Institution: Macquarie University

Participating Institutions: University of New South Wales, University of Sydney