

Stocktake Report for the Mental Health and Addiction Inquiry

A background report prepared for the Inquiry panel

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The EleMent/Otago University research was commissioned by the Mental Health and Addiction Inquiry to assist the Panel in its internal deliberations. As well as reviewing New Zealand and international literature, they also identified and proposed possible directions the panel could consider specific to the Terms of Reference.

This report should be read in conjunction with the supplementary EleMent/Otago University report titled “Recent trends in service use, unmet need, and information gaps”, also dated July 2018.

This work was produced as one input only amongst other commissioned research, and additional to information received by the Inquiry in over 5200 submissions and conveyed at over 400 meetings.

Executive Summary

This Stocktake of Evidence and Actions was produced for the Mental Health and Addiction Inquiry panel by a team at the University of Otago, Wellington.

The stocktake is a rapid review of existing published and grey literature, focusing on areas identified by the Inquiry Panel and key areas and ideas from the literature. Every effort has been made to use the most up to date information available. However in some cases further information will have become available over the time of writing or subsequent to this report. Moreover, other considerations such as comparability and relevance to the New Zealand situation have also informed the choice of information included.

The purpose of this stocktake report is to provide conceptual frameworks for identifying key areas of focus for the Inquiry, and to identify key documents and resources providing more information on these areas of focus. This report is not intended to stand alone, but to supplement other information that is available to the Inquiry

This report has five main parts, which are explained below.

The prevalence of mental health conditions and addictions

Mental health conditions and substance use are common in Aotearoa New Zealand. The most common mental health conditions are depression and anxiety. The most common substance of addiction used is alcohol. Cannabis use is also common. There are significant inequalities in the prevalence of mental health conditions and addictions and in treatment receipt. Māori and to a lesser extent Pacific people have higher rates of mood disorders and schizophrenia. The prevalence of disorders is also associated with deprivation, with higher rates in more deprived communities. Women have high rates of many conditions than men. However suicide rates are higher in men.

The most reliable estimates of prevalence come from the 2004 New Zealand Mental Health Survey Te Rau Hinengaro (TRH) which used a diagnostic interview tool to identify mental health conditions. However TRH is now 14 years old and out of date.

The structural determinants of mental health and wellbeing

Conceptual frameworks of structural-level determinants of mental health and addiction challenges and concepts can be used to guide the development of policy and interventions. Social determinants are “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” (WHO). They are the main drivers of health inequities; that is, unfair and avoidable differences in health status. Thus, targeting social determinants is an important prevention approach for mental health challenges and addictions. There are many ways in which social and economic determinants

can have detrimental effects on mental health, but the single underlying factor is exclusion.

Important mechanisms of exclusion in Aotearoa New Zealand include colonisation, discrimination, social isolation, poverty and economic deprivation, trauma and adverse childhood experiences, and the stigma of mental distress itself. Targeting these mechanisms may not be direct 'mental health intervention', but addressing these mechanisms is essential for meaningful change in mental health outcomes.

Because mechanisms of exclusion are often structural, they are usually most effectively addressed at structural rather than individual levels. Human rights frameworks offer a cohesive approach to addressing exclusion that can draw together multiple sectors and stakeholders, while the monitoring and reporting requirements of rights frameworks help to maintain transparency and accountability.

It is essential to consider wellbeing promotion alongside efforts to prevent and ameliorate distress. Wellbeing is more than simply the absence of distress: it is a positive concept that expresses what people intrinsically value in life. Too strong a focus on policies and interventions to reduce distress may result in missed opportunities to identify strengths and promote wellbeing.

Wellbeing is based on an individual's sense of identity, purpose and belonging, which is created and fostered by a range of social relationships. Having social resources to call on increases an individual's resilience to hardship. Resources may be identified at the individual, whānau, community or society level, and it is important to note that wellbeing, too, is not only experienced by individuals but can be located in whānau, in communities and in society as a whole.

Taking action for key populations

The Inquiry Terms of Reference identified populations of particular interest who are at high risk of adverse mental health and addictions outcomes. **These populations are:** youth, Māori, Pacific peoples, people living in poverty, disabled people, minority, immigrant populations, people with a refugee background, victims of violence, LGBTIQ+ populations, people with a family history of mental health conditions, prison populations, socially isolated people, older people, rural and farming populations, and veterans.

We have grouped these population groups into three types: life course, common identity, and common experience. There are intersections between these types of population, for example disability might be both identity and experience for different people. However this framework provides a starting point for considering why particular populations might warrant particular focus, and allows extension to new populations of interest.

Populations defined by their position in the **life-course** (tamariki, rangatahi, pakeke, kaumatua). These populations are numerically large and life stages are common to all people.

Different preventive and supportive interventions are relevant for different life stages, from antenatal care and parenting support in early life to programmes to combat social isolation in the elderly. The important setting of promotion, prevention and support also vary over the lifecourse: in early life the family setting is primary, later school and workplace settings are most effective.

Populations defined by an aspect of their **identity**, for example their ethnic or cultural identity, sexual orientation, or a disability.

The difficulties experienced by these populations often derive from discrimination and stigma at both structural and individual levels, which interventions for these populations will need to address.

Models of care embedded in cultural and social realities are also important for meeting the needs of these groups. A culturally safe and diverse workforce is needed. Support for social connectedness, including community development is another key factor for prevention and responding to need.

Populations defined by a **common experience** or set of circumstances, e.g. refugees, migrants, prison populations and other persons involved in the justice system, homeless persons, rural and farming populations, and veterans. These populations often have challenges and support needs that are highly specific to that population, requiring a tailored approach to services. Disconnection and trauma are often key issues to address with these populations, and policy approaches need to focus on minimising and mitigating disconnection.

There are common factors which are important for all population groups. A key area identified was the importance of robust data collection to enable the reliable monitoring of service quality and outcomes for different groups. Empowerment and autonomy, the recognition of trauma, and the right supports for social connectedness are important for all population groups. Person centred care, where mental health and physical health are not separated in the services provided, is also important for many population groups, for example the Youth One Stop Shop model and kaupapa Māori providers both provide holistic care.

Taking action across services

Health and social service responses to the needs of people experiencing mental health and addiction challenges need to be integrated, accessible and fit for purpose.

The panel has already identified integration as a key area for potential improvement. This includes integration across health and social sectors, between primary and secondary mental health services, and between services for physical and mental health, as well as integration of mental health and addictions services, and integration of responses to meet the needs of specific populations.

Timely access to the right level of support is another key area for service improvement, as it has been identified as problem in New Zealand at present. Stepped care is a model for providing the least intrusive intervention required to meet mental health and addictions needs, and thus increasing

access to support and care. In New Zealand and elsewhere stepped care is proposed as a mechanism for putting more resource into self-help and primary and community mental health services, and better linking levels of service provision at different levels.

E-mental health interventions have the potential to improve access to help, where they are well linked in with other levels of support, and where they are high quality and evidence based. The current proliferation of available online tools is difficult to navigate, and a single online gateway such as established in Australia is one option.

Increasing access to psychological therapies is another key area for accessibility, which has been recognised as key internationally. In New Zealand the importance has been recognised, but the workforce and cost barriers have not yet been overcome.

Crisis services are another key area where New Zealand mental health services have been found wanting. Different models of crisis care, including peer led models and community respite may present a better solution than the current use of the emergency department and inpatient admissions.

Services provided must also be fit for purpose. Five aspects of support are the focus of this section: trauma informed care, peer led and co-designed services, least restrictive services, zero suicide as a quality marker for services, and culturally safe services. Examples and guidance from New Zealand and overseas are used to identify promising approaches in these areas, including new approaches for people experiencing psychosis.

Systems change for wellbeing and mental health

Finally, system level factors need to be considered in order to change the way our society promotes and protects wellbeing and responds to those in need.

The Mason report found leadership in the mental health system and the mental health sector lacking, and it remains a challenge. Mason's proposed solution, a national mental health commission, could provide leadership for the sector, but would need to have a wide focus, be protected and sustainable, and have a high level mandate. Diverse leadership will also be important within any commission and at all levels of the sector, including Māori and Pacific leadership and peer leadership. A new commission could also build on the momentum and public engagement of the Inquiry and the People's Mental Health Report before it, by finding ways to continue to be an institution which is open to people, building on the idea of the open, participatory and peer-driven "New Power".

Fragmentation of the mental health sector is also an issue. Cohesion and integration of services and systems is needed to ensure a seamless process for people using the mental health system, and to improve the system's sustainability. Currently, there is little ability to improve the existing model. Health service providers are working at capacity, so if they do try an alternative approach their

current service's viability may be undermined. Funding and funding models are also issues. The workforce, particularly for delivering psychosocial therapies, is a key area of need. Career pathways are important for all those involved in the sector, including peer workers.

A good mental health data system would collect a range of information relevant to mental health and addiction including incidence and prevalence, wellbeing, service use, service quality and performance. New Zealand has no national collection for primary care data. Information on primary care interactions is not easily accessible. Mental Health research in Aotearoa New Zealand is currently fragmented and there is no dedicated strategic funding for mental health and addiction research.

Most of the determinants of health, and particularly mental health, fall outside the control of the health sector. Finding ways to cement collaboration between the sectors is therefore key, and there are a number of promising local and international models. One area of particular policy importance for mental health and addiction is child policy. New Zealand has sufficient knowledge and the means to create its own form of world-leading child-friendly public policy and there are promising signals of change.

Conclusions

There are many challenges for promoting wellbeing and reducing mental distress in Aotearoa New Zealand. These challenges include structural-level mechanisms of exclusion such as discrimination and stigma, factors leading people to become disconnected from one another, and fragmented health care systems and services that are struggling to meet current demand. Some populations are particularly in need of support, but many of the required approaches to improving mental health are applicable to all, across society and over the life course.

A wellbeing approach requires that people have the opportunity to define what is meaningful for them and what will make a difference, taking a rights based approach. We also need measures designed to capture wellbeing, and evaluation designed to assess how effective we are being in our attempts to promote wellbeing and reduce inequalities.

The wellbeing of people experiencing mental health and addiction challenges is also important, and service provision which ensures that people for whom service is provided have voice, dignity, rights and are culturally safe, whether the contact is routine or in crisis.

A wellbeing approach is about identity and connectedness, and promotion of wellbeing requires identifying important pathways of connectedness. Indigenous understandings of wellbeing, identity

and connectedness provide an excellent basis for building a new approach for Aotearoa New Zealand.

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Chapter 1

1.1 Motivation for the current Inquiry

Evidence from a wide range of sources including family members, academic researchers, health service providers, and the lived experience of New Zealanders confirms the high levels of distress in our population: suicide in particular continues to devastate families and communities. The scale and urgency of the mental health and addictions challenges that we face has resulted in increasing and unsustainable pressure on mental health and addiction services. Another serious concern is the marked inequalities that are evident both in the prevalence and severity of mental health and addictions challenges and in the ability of New Zealanders to access the support that they need.

This situation has prompted the New Zealand Government to establish a Government Inquiry into Mental Health and Addiction. The purpose of the Inquiry is to “identify unmet needs related to mental health and addiction, and develop recommendations for a cohesive mental health and addiction approach for Aotearoa, New Zealand” (<https://www.mentalhealth.inquiry.govt.nz/>).

1.2 The need for transformative solutions

The establishment of an Inquiry is a clear call for action, and not just from the health sector. As we show in this review, many of the mental health and addiction challenges in our population today have their roots in factors beyond the health sector, suggesting that the health sector alone should not be expected to deliver all of the solutions. In fact, international experience shows that increased provision of treatment for common mental disorders does not decrease the prevalence of these disorders (Jorm et al. 2017). In New Zealand, a recent report produced by the Office of the Prime Minister’s Chief Advisor emphasised this point, arguing that

“We need to ensure that we do not simply deliver more of what we already do; failure to change will mean disrupted, unproductive lives and a continuing high financial burden on the state” (Potter et al. 2017b).

Instead, the report’s authors recommended a “Whole of Government/Whole of Nation” approach to mental health that would include: “the bringing together of those pieces [ministries] into a coherent whole; 2) an understanding that mental health is not just a health problem; 3) upgrading skills and building new capacity across the sector; 4) a focus on prevention, early detection, and better treatment; 5) an understanding of the life course and its implications for mental health; 6) active consideration of those contextual levers that can be reached; 7) time”.

These ideas are echoed in the Inquiry Terms of Reference and in the New Zealand-based and international evidence we have examined, suggesting that there is a broad consensus about the direction that Aotearoa New Zealand should be taking. However, transformative change is challenging because it requires policymakers to consider problems in new ways and to engage with complex pathways of cause and effect. In this situation it can be easy to default to established systems and solutions, even when they are not optimal.

For this reason, the first section of the review outlines frameworks and concepts that can support the development of transformative solutions by:

- Keeping the frame of reference broad so that a cohesive approach can be developed between and across sectors;
- Providing some new ways of thinking about old problems that can help to make innovative solutions more visible; and
- Ensuring that useful solutions, particularly those outside the health sector, do not drop out of the frame.

Above all, however, these frameworks and concepts can help to guide the development of a whole of population approach in which promotion of wellbeing for all New Zealanders provides a solid foundation for more specific strategies to address mental health and addiction challenges. We propose that it is through these integrated approaches that Aotearoa New Zealand can achieve the transformative and sustainable change urgently needed.

1.3 Aim, objectives, and scope of this report

1.3.1 Aim

In this report we present a critical review of the existing evidence on mental health and addiction, with the aim of supporting the information needs of the Inquiry Panel. As articulated by the Panel, the evidence comprises “reports, studies, data and other recorded advice on the views of stakeholders as well as reviews/studies on the above areas of focus”.

1.3.2 Objectives

In conducting this review, the investigators were directed to:

1. Collate and summarise the evidence.
2. Evaluate the evidence.

3. Identify key themes and findings, including areas requiring further investigation.

1.3.3 Scope

The wide-ranging scope of the information stocktake reflects the broad scope of the Inquiry as a whole. The investigators were requested to consider a number of domains relating to mental health and addiction, many with several subdomains:

- **Mental health and addiction outcomes** included mental health and addiction challenges across the full spectrum from mental distress to enduring psychiatric illness; wellbeing; the range of alcohol and other drug addictions; and a strong focus on suicide;
- **Strategic approaches** included identifying and responding to people with mental health and addiction challenges; preventing mental health and addiction challenges; preventing suicide and supporting those close to someone who has died by suicide; and promoting mental wellbeing;
- **Types of activity** included policies, services, programmes and interventions;
- **Actors** included government and non-government agencies; multiple sectors including but not limited to the health and disability sectors; and community-based entities such as whānau or employers; and
- **Fourteen key populations** were identified by the Panel for consideration in the review:
 - Youth
 - Māori
 - Pacific peoples
 - People living in poverty
 - Disabled people
 - Minority, immigrant and refugee populations
 - Victims of violence
 - LGBTIQ+ populations
 - People with a family history of psychosocial disability
 - Prison populations
 - Socially isolated people
 - Older people
 - Rural/Farming populations
 - Veterans.

- **Settings** included both Aotearoa New Zealand-based and international evidence; and
- **Determinants** to be considered ranged from individual level through to structural levels, with a particular focus on social determinants.

In short, no topics are outside the scope of the Inquiry, and the information that is covered in this stocktake report includes very many topics that are complex issues in their own right. This broad scope presented a challenge for communicating the evidence reviewed in the course of the stocktake.

The extremely broad scope of this stocktake is necessary for a complete understanding of determinants of mental health and addictions and of mental health and addictions services in Aotearoa New Zealand that will inform recommendations for wide-ranging systemic change. Meeting the aims and objectives of the review required the investigating team to develop a cohesive overview of mental health and addiction in New Zealand, while at the same time engaging with key issues in enough detail to inform action. These tasks guided decisions on the selection and presentation of the information in this report. We have focused on providing information which is relevant to the New Zealand context and which highlights areas of good performance and areas of potential change and improvement. We consider the various ways in which structural determinants increase the risk and severity of mental health and addiction problems, contribute to high suicide rates, and undermine key protective processes such as wellbeing and resilience. These structural determinants include issues outside the mental health sector that are recognised to be critical threats to the current and future wellbeing of this country, including child and family poverty and the enduring and damaging legacy of New Zealand's colonial history. Throughout there is a focus on the particular groups who have been identified in the Inquiry's terms of reference, which we have categorised according to whether they are defined by life stage, identity or experience. There is also a brief concentrated review of each group in turn in Chapter 4.

The broad scope has prevented in-depth discussions of each topic and inevitably, many subtopics of interest could not be included in the review. Where relevant, we have suggested sources for further reading, and we have also indicated several areas where there are substantial information gaps requiring further research. One such area is the lack of data on mental health and addiction in New Zealand. The information presented in Chapter 2 is a summary of key results rather than a comprehensive review, as the University of Otago is currently preparing a more detailed report about mental health and addiction data; this additional report will include some primary analysis results to address current evidence gaps. However, as Chapter 2 shows, we already have enough information

to know that urgent action is required. In the course of this review, we consider what forms this action could take.

Ultimately the findings and recommendations arising out of this Inquiry will be determined by the Panel appointed by the Government, based on all the research, submissions and evidence they receive. Where we have suggested directions or recommendations in this report, or our supplementary report, “Recent trends in service use, unmet need, and information gaps”, they are informed by the material reviewed or the views of the authors, and are to be read in that context.

1.3.4 Structure of this review

Findings from the review are arranged into chapters as follows:

Chapter 2 Prevalence and distribution of mental health outcomes. In this chapter we summarise what is known about the prevalence of key mental health and addictions conditions in Aotearoa New Zealand and about inequities present.

Chapter 3 Key concepts and frameworks. This chapter has a strong focus on understanding and addressing the social determinants of health, but we also examine more positive concepts, in particular the promotion of wellbeing.

Chapter 4 Populations. In this chapter we examine mental health and addiction outcomes and action to improve outcomes, with a focus on populations of interest identified by the Inquiry.

Chapter 5 Services. In this chapter we review approaches for improving the service response to mental health and addiction needs in three areas: improving integration within the health system and between the health system and other systems; services providing accessible support; and services providing support which is fit for purpose.

Chapter 6 Systems. This chapter presents system level factors needed to make changes in the way our society promotes and protects wellbeing and responds to those in need, including the role of leadership and accountability, system structure to promote integration, data and research needs, and approaches to include wellbeing, particularly of children, in all policies.

Chapter 2

The prevalence of mental health conditions and addictions in Aotearoa New Zealand

Key points

Mental health conditions and substance use are common in Aotearoa New Zealand.

The most reliable estimates of the prevalence come from the 2004 New Zealand Mental Health Survey Te Rau Hinengaro (TRH) which used a diagnostic interview tool to identify mental health conditions and addictions. However TRH is now 14 years old and out of date.

Other estimates rely on self-report of doctor diagnosis (the New Zealand Health Survey) or health service contact (PRIMHD). These sources will underestimate the prevalence of conditions, as conditions which have not been diagnosed or for which help has not been sought will not be identified.

The most common mental health conditions are depression and anxiety.

The most common substance of addiction used is alcohol. Cannabis use is also common.

There are significant inequalities in the prevalence of mental health conditions and addictions and in treatment received. Māori and Pacific peoples have higher rates of mood and anxiety disorders. Māori also have higher rates of bipolar disorder and schizophrenia, although there is not good information available about schizophrenia prevalence. The prevalence of disorders is also associated with deprivation, with higher rates in more deprived communities. Hazardous drinking and cannabis use are more common among Māori.

Women have higher rates of many conditions than men. However suicide rates are higher in men.

2.1 Introduction

This chapter briefly outlines what is known about the prevalence of mental health and addiction conditions in New Zealand. For each condition and each substance of addiction (with the exception of tobacco), current estimates of prevalence from major sources are identified. Inequalities in prevalence between population groups are also identified.

The main sources of information used in this chapter are Te Rau Hinengaro (the 2004 New Zealand Mental Health Survey), and the New Zealand Health Survey 2015/16 (which included an extra module about mental health conditions). Other surveys of substance use and gambling, and academic literature, are also referred to. Te Rau Hinengaro, while now dated, provides the most reliable information on the prevalence of mental health conditions because a clinical interview was used to detect undiagnosed conditions. The New Zealand Health Survey on the other hand relies on self-report of mental health diagnoses.

More information on the data sources used in this chapter is provided in **Appendix D**.

Comparisons between groups are made in the form of percentage differences in prevalence between groups. They are also made in the form of rate ratios (calculated by dividing the rate in one group (A) by the rate in another (B), e.g. the Māori rate divided by the non-Māori rate) which are adjusted for differences in the age structure of the two populations being compared. The adjusted rate ratio (ARR) is a useful measure of the difference between groups. An ARR of greater than one means that the rate of the condition is higher in the first group (A).

Comparisons are also made to Australian and other international estimates of prevalence where this is possible. Where possible, comparisons are made to studies undertaken over a similar time period to the available New Zealand data.

2.2 Prevalence of mental disorders

2.2.1 Depression

The 2016/17 NZ Health Survey (NZHS) found that 16.7% of adults reported a lifetime diagnosis of depression. Women were about 1.5 times more likely to have been diagnosed with depression than men (20.3% vs 13%) (Ministry of Health 2017b).

There was no significant difference in prevalence between Māori and non-Māori; but Asian and Pacific people were significantly less likely to report a diagnosis of depression than non-Asian and non-Pacific people after accounting for age differences between groups, with an age adjusted rate ratio (ARR) of 0.40 for Pacific people and 0.27 for Asian people (Ministry of Health 2017b). Those living in the most deprived neighbourhoods were almost twice as likely to report depression as those living in the least deprived neighbourhoods (ARR 1.80).

The lifetime prevalence of depression in the New Zealand Mental Health Survey Te Rau Hinengaro (TRH) was 16%, comparable to that in the NZHS, despite different survey methods. It was almost twice as common in women as in men (20.3% vs 11.4% lifetime prevalence) (Oakley Browne, Wells, and Scott 2006). There was no difference in lifetime prevalence between Māori and non-Māori; but Pacific people were less likely to be diagnosed with depression than others (10.5% vs 16% in total population).

Six per hundred people had experienced depression in the previous twelve months according to TRH (12 month prevalence of depression 5.7%). It was more common in women than in men (7.1% vs 4.2%); slightly higher in Māori (6.9%) than non-Māori; and slightly lower in Pacific (4.9%) than non-Pacific people.

International comparisons

The Australian National Survey of Mental Health and Wellbeing (NSMHW) reported a 12 month prevalence of depression of 4.1%. It was about 1.5 times more common in women (5.1%) than in men (3.1%) (Slade et al. 2009) – a prevalence and female: male ratio comparable to the TRH in New Zealand which used similar methods.

The US NCS-R estimated lifetime prevalence of major depressive disorder at 16.6% (Kessler et al. 2005). Countries in Europe's ESEMeD reported a lifetime prevalence of major depression of 12.8%; almost twice as high in women (16.5%) as men (8.9%) (Alonso et al. 2004). 12 month prevalence of major depression in the ESEMeD was 3.9%, and almost twice as high in women (5.0%) as men (2.6%). Again, these prevalence estimates and gender ratios are comparable to those found in TRH.

2.2.2 Bipolar Disorder

The NZHS 2016/17 found that 1.1% of adults reported a lifetime diagnosis of bipolar affective disorder (BPAD) (Ministry of Health 2017b). There was no significant difference in prevalence between men and women.

Māori were about twice as likely to have been diagnosed with BPAD as the general population (ARR 2.15); and Māori men 3.5 times more likely to have been diagnosed than non-Māori men (ARR 3.51). There was no significant difference in prevalence between Pacific and non-Pacific people. Asian people were much less likely to have been diagnosed with BPAD than the general population (ARR 0.04).

Those living in the most deprived areas were more likely to have been diagnosed with BPAD than those in least deprived areas, but this difference was not significant for the whole population. However there was a significant difference in diagnosis of BPAD in women from most deprived areas, who were 1.2 times more likely to be diagnosed with bipolar disorder (ARR = 1.21) than women from the least deprived areas.

The lifetime prevalence of bipolar disorder in Te Rau Hinengaro was slightly higher than that in the NZHS, at 3.8% (Oakley Browne, Wells, and Scott 2006b). It was slightly more common in men than women (4.1% vs 3.6%). Māori and Pacific people were more than twice as likely as the general population to be identified as having BPAD (8.3% prevalence for both groups).

12 month prevalence of BPAD in TRH was 2.2%. There was no difference in 12 month prevalence between men and women. Māori and Pacific people had a higher 12 month prevalence of BPAD than other ethnic groups (4.6% and 3.7% respectively)

International comparisons

In Australia the 12 month prevalence of bipolar disorder in the NSMHW was 1.8%. There was no difference in prevalence between men and women (Slade et al. 2009). As for depression, this prevalence and gender ratio is comparable to that found for 12 month prevalence in Aotearoa New Zealand's TRH for the general population.

Lifetime prevalence of bipolar disorder in the US based NCS-R was estimated at 3.9% (Kessler et al. 2005); which is comparable to the lifetime prevalence reported in TRH for the general NZ population of 3.8%. The ESEMeD studies did not report European prevalence for BPAD specifically.

It is notable that both 12 month and lifetime prevalence estimates of bipolar disorder reported for Māori and Pacific people in Te Rau Hinengaro were higher than international estimates.

2.2.3 Anxiety Disorders

Ten percent of NZ adults surveyed reported a lifetime diagnosis of anxiety disorder in the 2016/17 NZ Health Survey (Ministry of Health 2017b). Men were half as likely to have been diagnosed with anxiety disorder as women (ARR = 0.56).

Māori were about 1.2 times more likely to report a diagnosis of anxiety disorder as non-Māori (AR = 1.19); and Pacific people were half as likely to report a diagnosis of anxiety disorder as non-Pacific people (AR = 0.50). Asian people were also less likely to report a diagnosis of anxiety disorder as non-Asian people, at about a quarter of the prevalence of non-Asian people (AR = 0.24). Those living in the most deprived neighbourhoods were almost twice as likely to report a diagnosis of anxiety disorder as those living in the least deprived neighbourhoods (ARR 1.94).

In Te Rau Hinengaro (TRH), anxiety disorders were the most common mental disorders, at almost 25% lifetime prevalence (Oakley Browne, Wells, and Scott 2006b). This is in contrast to the NZHS, which found depression to be the most commonly reported mental disorder at 16.7% (Ministry of Health 2017b). Anxiety disorders were approximately 1.5 times more likely in women than men (29.4% vs 19.9%). There was a slightly higher prevalence of anxiety in Māori (31.1%) and Pacific (27.7%) people than the total population (24.9%); however, there were no comparative results available after adjustment for age, sex and other sociodemographic variables (in contrast to 12 month prevalences below).

12 month prevalence of any anxiety disorder in TRH was reported at 14.8% in the total population. It was about 1.7 times more likely in women than men (18.6% vs 10.7%). Once adjusted for age, sex, education, and household income, 12 month prevalence was not found to be significantly different between Māori, Pacific, and Other ethnic groups.

International comparisons

Australia's 2007 NSMHW found a 12 month prevalence of any anxiety disorder of 14.4%. Anxiety was approximately 1.7 times more common in women (17.9%) than men (10.8%). These results are comparable to those found in Te Rau Hinengaro (above).

Results from Europe's ESEMeD found a lifetime prevalence of any anxiety disorder of 13.6%; and prevalence was almost twice as high in women (17.5%) as men (9.5%) (Alonso et al. 2004). This is substantially lower than the lifetime prevalence of 24.9% found in TRH (Oakley Browne, Wells, and

Scott 2006b), although it is much closer to the lifetime prevalence found in the NZHS of 10% (Ministry of Health 2017b). 12 month prevalence of any anxiety disorder in ESEMeD was 6.4%; more than twice as high in women (8.7%) as men (3.8%). This is about half the 12 month prevalence of anxiety disorder of 14.8% found in TRH. Lifetime prevalence of any anxiety disorder in the US NCS-R was estimated at 28.8% (Kessler et al. 2005), comparable to the lifetime prevalence of 25% in TRH.

2.2.4 Schizophrenia

Schizophrenia is not included in the NZHS or Te Rau Hinengaro and so there are not survey based estimates available. Kake et al used health service use data and estimated 1 year prevalence of schizophrenia for non-Māori at 0.32%, and for Māori at approximately 1% - i.e. Māori had a prevalence of schizophrenia almost 3 times that of non-Māori (Kake, Arnold, and Ellis 2008). Adjusting for socioeconomic deprivation reduced the difference in prevalence estimates, but the estimates for Māori remained more than twice that of non-Māori.

Men had higher estimates than women within both Māori and non-Māori, and in similar ratios. Prevalence increases from the least deprived to most deprived residential areas for both Māori and non-Māori; however there is a significant interaction between ethnicity and deprivation, with prevalence for non-Māori increasing 6 fold from least to most deprived, while prevalence for Māori increased by a factor of 2.9.

International comparisons

In Australia, the 2010 Survey of High Impact Psychosis (SHIP) found an estimated 1-month treated prevalence of psychotic disorders in public treatment services was 3.1 people per 1000 population (0.31%) (Morgan et al. 2012). The 12-month treated prevalence was 4.5 people per 1000 (0.45%), similar to the non-Māori prevalence for NZ found by Kake et al.

A 2008 literature review found an overall international median lifetime prevalence of schizophrenia of 7/1000, or 0.7% (McGrath et al. 2008). They found no significant difference between males and females, or between urban, rural and mixed sites. Developed countries had slightly higher prevalence than less developed countries. A later systematic review in 2012 estimated median lifetime prevalence of schizophrenia at 0.48% (Simeone et al. 2015). These prevalence estimates are broadly comparable to both the NZ (non-Māori) and Australian prevalence rates of schizophrenia above.

2.2.5 Personality Disorders

Epidemiology of personality disorders is poorly described compared with other mental disorders, likely because it is difficult to accurately assess personality in national surveys. There are no Aotearoa New Zealand-based surveys of personality disorder prevalence to date, and so prevalence estimates of personality disorder are based on international data.

The first Australian National Mental Health and Wellbeing Survey (NMHWS) in 1997 found an overall prevalence of personality disorders in the community of 6.5% (Jackson and Burgess 2004). The second NMHWS in 2007 did not report personality disorder prevalence rates.

Community based studies internationally show a median prevalence of personality disorders of 5-10% (Lenzenweger 2008)(Samuels 2011) with consistency in prevalence rates across countries in those studies. Most specific personality disorders have a relatively low prevalence (<1%) – for example, a review of studies of 12 month prevalence in Europe estimated borderline personality disorder at 0.7% and antisocial personality disorder at 0.6% (Wittchen et al. 2011). A US study found prevalence of personality disorders of around 9%, with personality disorder strongly associated with substance misuse (Trull et al. 2010); and an international systematic review found a prevalence of between 4-15% in studies across North America and Western Europe (Tyrer, Reed, and Crawford 2015).

Most community studies showed similar prevalence of personality disorders as a group in men and women (Lenzenweger 2008)(Tyrer, Reed, and Crawford 2015); although a British survey found a higher prevalence in men than in women (5.4% vs 3.4%) – in particular, a higher prevalence of antisocial personality disorder in men (Coid et al. 2006).

In studies looking at clinical service use (as opposed to community studies) prevalence of personality disorders was found to be higher in women, which was thought by the authors to likely be due to higher help-seeking in women (Tyrer, Reed, and Crawford 2015).

In terms of ethnicity, most studies found no difference in prevalence (Tyrer, Reed, and Crawford 2015); but one community survey in Great Britain found higher prevalence in Black and other minority ethnic groups (Crawford et al. 2012).

2.2.6 Developmental Disorders in children

These are categorised variously depending on the data source as Autism Spectrum Disorder (ASD); Autism Disorder (AD), and Pervasive Developmental Disorder (PDD); and may include or exclude the higher functioning Asperger's Syndrome in prevalence rate estimates.

Total prevalence in the 2016/17 NZHS of Autism Spectrum Disorder (ASD), which included Asperger's Syndrome, in NZ children aged 2-14 years was 2.2% (Ministry of Health 2017b). Boys were over 4.5 times more likely than girls to have been diagnosed with ASD (3.6% vs 0.8%). There was no significant difference in prevalence of ASD by ethnicity or neighbourhood deprivation.

International comparisons

The Australian Institute of Health and Welfare estimate of autism prevalence for 2015 was 0.7% for the total population (in comparison to the NZ prevalence rates which only included children aged 2-14 years). Males were 4 times as likely as females to have autism (Australian Institute of Health and Welfare 2017a). The prevalence rates for children aged 5-14 years were approximately 2.7% (Australian Institute of Health and Welfare 2017a), similar to the total prevalence of 2.2% in the NZHS for children aged 2-14 years. The proportion of males to females with autism of 4:1 was also similar to that in the NZHS.

A systematic review of available worldwide studies estimated median prevalence of Autism Disorder (AD) and Pervasive Developmental Disorder (PDD). The former equates to the more severe end of the spectrum in ASD; whereas PDD can be compared to the broader ASD diagnosis. Overall median prevalence for AD was 17/10,000 (0.17%) and for PDD 62/10,000 (0.62%) (Elsabbagh et al. 2012).

A UK cohort study found prevalence of ASD at age 11 of 51.1/10,000 (0.51%) for multidisciplinary medical diagnosis; and 61.9/10,000 (0.62%) if cases from education were included. The male: female ratio was 6.8:1 (Williams et al. 2008). The reported prevalence rates are comparable to the rates for PDD found by Elsabbach et al.

The international studies appear not to have included diagnoses of higher-functioning ASD (Asperger's Syndrome) in their calculations, which would likely lead to lower estimates of prevalence in comparison to the NZHS which includes Aspergers in the ASD estimates.

2.2.7 Dementia

Total prevalence of dementia at baseline in LiLACS NZ (a cohort study of Māori aged 80-90 and non-Māori aged 85) was 16%, with no significant differences between Māori and non-Māori, or between men and women (Kerse et al. 2017).

International comparisons

The Australian Institute of Health and Welfare estimated prevalence of dementia in 2011 at 1.3% of the total population, 9% of those over 65 years, and 30% of those over 85 years (Australian Institute

of Health and Welfare 2012). Prevalence was estimated to be higher in women than men over 65, and particularly in older age groups.

A systematic review of global literature found that the age-standardised prevalence of dementia in those aged 60 years and above varies little between world regions, ranging from 5-7% in most regions (Prince et al. 2013). A UK study in a cohort of 85 years olds found a higher prevalence (of moderate to severe cognitive impairment) of 13% (Collerton et al. 2009), which corresponded to a previous British study; however most international comparisons have included those aged 60 years and above rather than just those over 85 years of age, which naturally leads to lower estimates of prevalence.

International prevalence has been noted to be higher in women than in men, particularly at older ages (Prince et al. 2013), in contrast to findings in New Zealand (Kerse et al. 2017).

The prevalence estimate of dementia in LiLACS NZ of 16% is more than twice international estimates of prevalence found internationally for most geographical areas (Prince et al. 2013), which likely relates to the way dementia prevalence was defined in the LiLACS study, with 'dementia' being diagnosed as present according to the participant's score on the Modified Mini Mental State Examination (3MS).

2.2.8 Suicide and intentional self harm

The Ministry of Health reports deaths as suicide if they are confirmed as such by the coroner, or if there is enough information to suggest that the coroner will find the cause of death to be suicide where the coroner's final verdict is not yet available. The Chief Coroner also releases provisional suicide statistics ahead of the coronial process, which therefore include a larger number of deaths than final suicide reporting.

The 2015 suicide rate as reported by the Ministry of Health was 11.1 per 100,000 population. The rate in males was over 2.5 times that in females (16.4 per 100,00 vs 6.1 per 100,000) (Ministry of Health 2017f).

The rate for Māori males was 25.3 per 100,000; 1.7 times that of non-Māori males (14.7 per 100,000). For Māori females, the suicide rate was 2.4 times that of non-Māori females (11.5 vs 4.7 per 100,000). The suicide rate in youth (age 15-24) is higher than for other age groups, at 16.9 per 100,000.

Suicide rates are highest in those living in the most deprived areas, with the rate in the most deprived area being twice the rate in the least deprived areas; this increases to four times higher in youth from most deprived compared to least deprived areas (Ministry of Health 2016b).

The provisional suicide rates from the Chief Coroner for 2017/18¹ indicate a rate of 13.67 per 100,000, a slight increase on previous years, driven primarily by increasing rates among Māori. However these rates must be treated with caution as it is unclear to what extent this is an overestimate.

Time trends data from 1996 to 2015² indicate an overall decrease in the rate of suicide over the 20 years period to 2015, which is primarily due to a reduction in the rate for men, with the rates for women changing little over this time. The rate among Māori has been higher over this time period, and has not reduced.

The most recent available data on rates of intentional self-harm come from the 2013 Ministry of Health suicide data. There was an intentional self-harm hospitalisation rate of 176.7 per 100,000 population (0.18%) in 2013 (Ministry of Health 2016b). Rates of intentional self-harm were higher in females (in contrast to suicide rates which were higher in males); in youth (aged 15-24); in Māori or European/Other ethnicity (compared with Pacific or Asian) and in those living in areas of high deprivation (NZDep quintiles 4 and 5) (Ministry of Health 2016b).

The Youth2000 surveys provide information on health and wellbeing of Aotearoa New Zealand secondary school students. Participants were asked about suicidal thoughts, attempted suicide and deliberate self-harm. In 2012 9.8% of males and 20.7% of females reported suicidal thoughts in the past 12 months, 2.4% of males and 6.2% of females reported a suicide attempt in the past twelve months, and 17.9% of males and 29.1% of females reported deliberately hurting themselves or otherwise trying to harm themselves (Clark et al., 2012).

International comparisons

The 2015 suicide rate in Australia was estimated at 13 per 100,000 population – similar to the New Zealand rate of 11.1 per 100,000. The rate was over three times higher in men (19 per 100,000) than women (6 per 100,000) (Australian Institute of Health and Welfare 2017c).

The 2007 NSMHW reported rates of suicidality (suicidal ideation, plans and attempts). 12 month prevalence of any suicidality was 2.4% (2.3% prevalence of suicidal ideation; 0.6% prevalence of

¹ <https://coronialservices.justice.govt.nz/assets/Documents/Publications/2017-2018-Annual-Provisional-Suicide-Statistics-Final.pdf>

² <https://www.health.govt.nz/publication/suicide-facts-data-tables-19962015>

suicide plans; and 0.4% prevalence of suicide attempts) (Slade et al. 2009). Suicidality was higher in females (2.8%) than males (1.9%), similar to the 2013 NZ data, and in contrast to completed suicide which as in NZ, was higher in men.

The WHO estimates the global suicide rate for 2015 at 10.67 per 100,000 population (World Health Organisation 2017a). Rates vary markedly between countries and regions – for example, in 2015 WHO-reported rates in the US were 12.6 per 100,000, in the UK 7.4 per 100,000, in Australia 10.4 per 100,000, and in NZ 12.3 per 100,000.

2.3 Prevalence of Substance Use and Addiction Disorders

2.3.1 Alcohol Use Disorders

The 12 month prevalence of hazardous drinking in the 2016/17 NZHS was 19.5% (Ministry of Health 2017b). Men were more than twice as likely to be hazardous drinkers as women (27.1% vs 12.4%; AR 2.14). ‘Hazardous drinking’ refers to an established alcohol drinking pattern that carries a risk of harming the drinker’s physical or mental health or having harmful social effects on the drinker or others. An AUDIT³ score of 8 or more indicates a hazardous drinking pattern.

Māori were 1.7 times more likely than non-Māori to be hazardous drinkers (ARR 1.70) and Māori women were more than twice as likely to be hazardous drinkers as non-Māori women (ARR 2.32). In contrast, Asians were significantly less likely to be hazardous drinkers than non-Asians (ARR 0.24).

Those living in the most socioeconomically deprived areas were almost 1.5 times more likely to be hazardous drinkers than those living in the least socioeconomically deprived areas, after adjustment for age, sex and ethnicity (ARR 1.45).

In Te Rau Hinengaro (TRH) rates of DSM-IV ‘alcohol abuse’ were estimated via a standardised diagnostic interview. 12 month prevalence of alcohol abuse in TRH was 2.6%, with men having just over twice the prevalence of women (3.7% vs 1.6%) (Oakley Browne, Wells, and Scott 2006b).

Lifetime prevalence was estimated at 11.4%, with a similar male:female proportion to 12 month prevalence. Prevalence in Māori was more than twice that of the general population (6.7% 12 month and 24.4% lifetime prevalence) – similar to the relative rates of hazardous drinking in the NZHS.

Pacific people had almost 1.5 times both the 12 month and lifetime prevalence rates of alcohol abuse compared to the general population (3.7% and 17.0% respectively).

³ The Alcohol Use Disorders Identification Test (AUDIT) is a 10-item questionnaire that covers three aspects of alcohol use: alcohol consumption, dependence and adverse consequences. A score of eight or more indicates a hazardous drinking pattern. A respondent can reach a score of eight from the alcohol consumption items of the questionnaire alone, for example, by consuming six or more drinks on each occasion, twice a week.

International comparisons

In Australia the 12 month prevalence rate of 'harmful use' of alcohol (equates to TRH 'alcohol abuse') in the 2007 NSMHW was 2.9% in the total population (Slade et al. 2009), comparable to the 2.6% total prevalence rates for alcohol abuse in TRH for New Zealand. Males had a prevalence rate 1.8 times than of females (3.8% vs 2.1%), similar to the male:female prevalence ratio in TRH for New Zealand.

The WHO Global status report on alcohol and health reported age standardised 12 month prevalence of harmful use of alcohol, which is roughly comparable to alcohol abuse in TRH (World Health Organization: Management of Substance Abuse Unit 2014). US prevalence of any harmful use was 2.7%; and UK prevalence 5.2%. The WHO rates for NZ and Australia were lower than prevalence rates for alcohol abuse estimated in TRH (2.6%) or harmful use of alcohol estimated in the NSMHW (2.9%), with WHO estimates for NZ of 1.9% and Australia of 2.0%. Both were substantially lower than UK and US rates.

2.3.2 Any substance use disorder

Te Rau Hinengaro also reported prevalence estimates for 'any' substance use disorder (SUD). 12 month prevalence of 'any SUD' was estimated at 3.5%; and was higher in men (5.0%) than women (2.2%). Prevalence was substantially higher in Māori (8.6%) than the total population. Lifetime prevalence of 'any SUD' was 12.3%; and again, prevalence was higher in men (17.3%) than women (7.7%). Prevalence was again higher in Māori (26.5%) than the total population.

Te Rau Hinengaro also reported estimates of prevalence of 'drug abuse'. 12 month prevalence of drug abuse was 1.2% (Oakley Browne, Wells, and Scott 2006b). Men were twice as likely to have abused drugs as women (1.6% vs 0.8%). Prevalence for Māori was three times greater than that in the general population (3.7%).

In Australia the total 12 month prevalence of any SUD was 5.1%, which was comparable to the TRH prevalence of 3.5% (Slade et al. 2009).

2.3.3 Cannabis use

The 2016/17 NZHS estimated 12 month prevalence of cannabis use at 11.6% (Ministry of Health 2017b). Men were almost twice as likely to have used cannabis as women (15.7 vs 7.7%; AR 1.95).

Māori were more than twice as likely to have used cannabis as non-Māori (prevalence 25.6%; AR 2.22); while Asian people were less likely to have used cannabis in the preceding 12 months

(prevalence 2.9%; AR 0.16). Those in the most deprived areas were more likely to have used cannabis than those in least deprived (AR 1.86).

12 month prevalence of 'cannabis abuse' reported in Te Rau Hinengaro was 0.9% (Oakley Browne, Wells, and Scott 2006b). It was twice as high in men (1.3%) as women (0.6%). 12 month prevalence in the Māori population was about 3 times higher than the population as a whole, at 3%.

International comparisons

In Australia the 12-month prevalence of harmful use of cannabis in the 2007 NSMHW was 0.6%. It was approximately 2.5 times higher in men (0.8%) than women (0.3%). This is similar to the 12 month prevalence in Te Rau Hinengaro of 0.9%.

The Australian National Drug Strategy Household Survey (NDSHS) 2016 estimated 12 month prevalence of cannabis use at 10.4% (Australian Institute of Health and Welfare 2017d), which was similar to the NZHS findings. Both were household surveys, and data collection methods were comparable.

A systematic review of global studies of drug abuse and dependence estimated a 12 month prevalence of cannabis use for the UK of 10.3%; and for the US of 10.1% (Degenhardt et al. 2011). The specifics of how these prevalence estimates were calculated was not reported; but they are very similar to that found in the 2016/17 NZ Health Survey of 11.6%.

2.3.4 Amphetamine use

The 12 month prevalence of amphetamine use in adults aged 16-64 in the 2016/17 NZHS was estimated at 1% (Ministry of Health 2017b). Men were more than 2.5 times more likely to have used amphetamines in the past year than women (1.5% vs 0.6%; AR 2.62)

Māori were three times more likely than non-Māori (12 month prevalence 2.4%; AR 3.1) to have used amphetamines in the past year; whereas similarly to cannabis use; Asian people were much less likely to have used amphetamines (12 month prevalence 0.1%; AR 0.08). There was no significant difference in usage according to neighbourhood deprivation level.

International comparisons

In Australia the 12 month prevalence of stimulant abuse was reported in the 2007 NSMHW at 0.4%, 2.5 times higher in men (0.5%) than women (0.2%) (Slade et al. 2009). While this is lower than the prevalence in the NZHS, the small absolute numbers in the survey make it difficult to compare results. The National Drug Strategy Household Survey 2016 (Australian Institute of Health and

Welfare 2017d) estimated 12 month prevalence at 1.4%, which is more comparable to the prevalence found in the NZHS.

A 2011 systematic review estimated prevalence of past year amphetamine use in the UK at 1.5%; and in the USA at 1.2% (Degenhardt et al. 2011). These 12 month prevalence rates are comparable to the rates in the NZHS of 1%.

2.3.5 Opiate use

The 2007/08 New Zealand Alcohol and Drug Use Survey (NZADUS) (Ministry of Health 2010b) estimated lifetime and 12 month prevalence of any opiate use (including heroin and prescription painkillers such as morphine) for recreational purposes in adults aged 16-64 years.

Lifetime prevalence of opiate use was estimated at 3.6% of adults. Men were significantly more likely to have ever used an opiate (4.4%) than women (2.8%). People of Māori (4.6%) European/Other ethnicity (3.8%) were significantly more likely to have used opiates; and people of Pacific or Asian ethnicity were significantly less likely (2.1 and 1.3% respectively) to have ever used any opiate for recreational purposes, compared with people in the total population. The prevalence of having ever used any opiate for recreational purposes was somewhat higher in the most deprived neighbourhoods (3.9%) than the least deprived (2.7%).

12 month prevalence of recreational opiate use was found to be about 1 in 100 (1.1%) of adults aged 16–64 years. There were no significant differences in the prevalence of having used any opiates in the past year between men and women, or between ethnic groups. The 12 month prevalence of opiate use was slightly higher in those living in the most deprived (0.6%) compared with the least deprived neighbourhoods (0.2%).

International comparisons

The Australian National Drug Strategy Household Survey 2016 estimated 12 month prevalence of use of 'painkillers and other analgesics/opioids' at 3.6% (the second most used illicit drug after cannabis) (Australian Institute of Health and Welfare 2017d) – substantially higher than 12 month prevalence of opiate use in the NZADUS. The 12 month prevalence of 'heroin and injecting drug use' was 0.3%. Misuse of methadone/buprenorphine (opiate replacement therapies) was estimated at 0.1% 12 month prevalence.

Prevalence was estimated from a systematic review of global studies on the prevalence of drug abuse and dependence (Degenhardt et al. 2011). Lifetime prevalence of opiate abuse in the UK was estimated at 0.7%, and 12 month prevalence at 0.1%. Lifetime prevalence of opiate use in the US was reported at 1.5%, and 12 month prevalence at 0.1%. These are substantially lower than prevalence

rates estimated by the NZ and Australian household surveys above, which is likely due to methodological differences rather than significantly lower opiate use in the UK or US.

2.3.6 Problem Gambling

The National Gambling Study (NGS) 2012 (Abbott et al. 2014) assessed problem gambling using two internationally validated standardised scales: the Lifetime South Oaks Gambling Screen (SOGS-R)⁴, which provides a measure of lifetime gambling problems; and the Problem Gambling Severity Index (PGSI)⁵, which provides a measure of current (past 12 months) gambling problems.

The SOGS-R lifetime prevalence of probable pathological gambling was estimated at 2.1%; and prevalence of lifetime problem gambling at 2.4%. Independent risk factors for increased lifetime prevalence of combined probable pathological/problem gamblers were male gender (prevalence 5.7%; Odds Ratio 1.81 vs female) Māori ethnicity (prevalence 10.2%; OR 2.37 vs European/other ethnicity), and high neighbourhood deprivation (prevalence 8.2%; OR 1.71 vs least deprived quintile)

The PGSI 12 month prevalence of problem gambling was estimated at 0.7%; and 12 month prevalence of moderate-risk gambling at 1.8%. The combined moderate-risk/problem gambling prevalence was 2.5% (studies often combine these two measures as the absolute numbers are often quite small). 5% of adults were assessed as current low-risk gamblers.

Independent risk factors for PGSI combined moderate-risk/problem gambling were male gender (prevalence 1%; OR 1.59 vs female); Māori or Pacific ethnicity (prevalence 7.4% and 10.2% respectively; OR vs European/other ethnicity 2.34 and 2.98 respectively); and high neighbourhood deprivation (prevalence 7.5%; OR 1.85 vs least deprived quintile).

Other associations with PGSI problem or combined moderate-risk and problem gambling included lower education; continuous modes of gambling (see footnotes); harmful alcohol use; tobacco use; other drug use; psychological distress; and poor self-rated health.

Follow up surveys at 12 months and 2 years indicated little change in overall prevalence of at risk and problem gambling, but some movement between groups, with individuals moving up and down in risk. Previously having a gambling problem was found to be a strong predictor of developing at risk or problem gambling (Abbott 2016).

⁴ SOGS-R categories: Participants are classified according to their scores: non-problem gamblers (0-2); problem gamblers (3-4); probable pathological gamblers (5+)

⁵ PGSI categories: Participants are classified according to their scores: non-gamblers (not gambled in the past 12 months); non-problem gamblers (0); low-risk gamblers (1-2); moderate-risk gamblers (3-7); problem gamblers (8+)

A detailed analysis of the 2011/12 NZHS (which also used the PGSI) (Rossen, 2015) found 12 month prevalence of moderate-risk gambling was 1.0%; and of problem gambling 0.2%; giving a combined prevalence of moderate-risk/problem gambling of 1.2%. A further 2.0% satisfied the criteria for low-risk gambling. These rates were lower than those found in the 2012 NGS (Abbott et al., 2014).

Demographic risk factors for problem gambling were similar to those found in the NGS: adults that satisfied the criteria for moderate-risk/problem gambling were more likely to be male; identify as Māori or Pacific ethnicity; and live in urban neighbourhoods with higher levels of deprivation. Other factors associated with problem gambling were alcohol abuse/dependence; tobacco smoking; illicit drug use; lower self-rated health; and anxiety or depression. These factors were similar to the links seen in the 2012 NGS.

The NZHS analysis also found that Electronic Gaming Machines (EGMs) were associated with the most gambling harm, with moderate risk/problem gamblers 13-14 times more likely to have gambled on EGMs than non-problem/recreational gamblers. Those who participated in four or more gambling activities were also more likely to meet criteria for problem gambling, with 33.4% of moderate-risk/problem gamblers participating in four or more activities compared with 4% of non-problem/recreational gamblers (Rossen 2015).

International comparisons

In Australia the Victorian Gambling Study (VGS) 2008-2012 (Billi et al. 2014) estimated prevalence of problem gambling using the PGSI. Prevalence of problem gambling was estimated at 0.7% and moderate-risk gambling at 2.4% - giving a combined moderate-risk/problem gambling prevalence of 3.1%. These rates are comparable to those found in the NZ National Gambling Survey (Abbott et al., 2014), and slightly higher than that found in the NZHS 2011/12 of 1.2% combined prevalence (Rossen, 2015).

Prevalence was twice as high in males as females, and significantly higher in those from Indigenous backgrounds – similar to the findings in the NZ studies. The VGS also noted a significant association between use of EGMs and problem gambling, with participation in EGM gambling increasing with increasing PGSI score.

Williams et al reported global standardised 12 month prevalence rates of problem gambling ranging from 0.5% (Denmark and the Netherlands) to 7.6% (Hong Kong), with an average rate across all countries of 2.3% (Williams, Volberg, & Stevens, 2012a). NZ rates were given as 1%, Australian as 2% and those in Great Britain at 1.3%, all below the international average. These rates are comparable to those from New Zealand's NGS and NZHS, and Australia's VGS above.

The Swedish Longitudinal Gambling Study, a similar household survey to the NZHS and NGS in NZ, and the VGS in Australia, found PGSI 12 month prevalence of problem gambling of 0.3% and moderate-risk gambling of 1.9% (combined 2.2%) (Abbott, Romild, & Volberg, 2014a). The SOGS-R lifetime prevalence of probable pathological gambling was 2.0%, and of problem gambling 2.5% (combined 4.5%). These are comparable to the prevalence rates found in the NGS, NZHS and VGS.

Chapter 3

Taking action on the structural determinants of mental health and addiction

Key points

The social determinants of health are 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 and are driven by values and norms of societies.

Health inequities are unfair and avoidable differences in health status. Action to address the social determinants of poor mental health outcomes is not only a moral imperative to reduce inequities, it is also a key prevention strategy.

The common underlying factor on social determinants pathways is exclusion. Mechanisms of exclusion include colonisation, discrimination, social isolation (loneliness), poverty and economic deprivation, trauma and adverse childhood experiences, and stigma of mental illness.

Strategies for intervening on the social determinants of mental health outcomes include:

1. Addressing upstream factors
2. Integrating action at multiple levels and across sectors
3. Focusing on populations
4. Focusing on key points that have cascading effects through the system
5. Intervening directly on the mechanisms of exclusion.

Action needs to be aligned to the principles of health promotion: taking a holistic approach to health, respecting diverse cultures and beliefs, promoting positive health as well as preventing ill health, working at structural not just individual levels, and using participatory methods.

Valuable insights can be gained by asking questions about how exclusion and connectedness play out in the lives of people and communities.

There is a need to frame and act on positive values and wellbeing alongside activities aimed at prevention and recovery.

Effective interventions that improve population mental health may not be mental health interventions as they are traditionally viewed and may not derive from established mental health structures and services; instead, population mental health can and should be promoted at all levels and in every domain of society to address exclusion and promote connectedness.

3.1 Introduction

In this chapter we present key concepts or frameworks to guide action:

- Taking a public health approach;
- The social determinants of mental distress, mental illness, low wellbeing, addiction, and suicide;
- Human rights frameworks;
- Population promotion of wellbeing;
- Resilience; and
- Pae Ora.

This chapter complements the evidence in the review about services by considering factors outside mental health services, starting with public health approaches but also considering whole-population concepts that are outside the traditional boundaries of the health sector. In particular, this chapter focuses on inequities in health, and on the structural determinants of these inequities.

It can be difficult to find robust evidence about what works for intervening in the structural determinants of health. For ethical reasons, it can be difficult to randomise on social determinants as they are known to be harmful. Also, these pathways tend to be highly contextual, with the result that effective interventions in one population do not always translate successfully to another. For this reason, strong quantitative evidence in the form of multicentre randomised controlled trials is much less common in public health than in other fields of health research. Identifying evidence from qualitative research and storytelling can also be problematic: structural inequalities by their nature tend to silence the voices of the people who are most affected by these processes.

Another evidence limitation is that although we have a large body of observational evidence about how things go wrong, there is a lack of positive frameworks and concepts to understand how things go right, and what optimal mental health or wellbeing might look like. This conceptual gap can make it difficult to develop policies and promotion activities for the outcomes that we do want to see (Kvalsvig et al. 2014).

In the absence of a robust body of intervention evidence, it is helpful to base policy and intervention planning on explicitly-stated conceptual frameworks. As well as generating a systematic and organised response, this approach focuses policy and intervention attention on collectively-held values, understanding, and priorities. As outlined in the Introduction, developing strong concepts and

frameworks has an additional advantage compared to working from formal evidence-based sources of knowledge in that it enhances the potential to deliver transformative change by:

- Keeping the frame of reference broad so that a cohesive approach can be developed between and across sectors;
- Providing some new ways of thinking about old problems that can help to make innovative solutions more visible; and
- Ensuring that useful solutions, particularly those outside the health sector, do not drop out of the frame.

In this chapter we outline some concepts and frameworks that are particularly relevant to mental health and addiction.

3.2 A public health approach to mental health and addiction challenges

Nearly 100 years ago, Charles-Edward Winslow published a definition of public health that is still used today:

“Public health is the science and art of preventing disease, prolonging life and promoting physical health and efficacy through organized community efforts ... and the development of social machinery which will ensure every individual in the community a standard of living adequate for the maintenance of health; so organizing these benefits in such a fashion as to enable every citizen to realize his birthright and longevity” (Winslow 1920).

More recent definitions use updated language but describe a very similar concept to that outlined by Winslow:

“... one of the efforts to protect, promote and restore the people's health. It is the combination of sciences, skills and beliefs that is directed to the maintenance and improvement of the health of all the people through collective or social actions” (Last et al. 2001).

Three key concepts are central to these definitions:

- The inclusion of both promotion and prevention activities;
- The collective nature of these activities; and
- The health of the whole population as the goal.

These three concepts underpin many of the findings of this review. In the New Zealand context there is an additional challenge for public health:

- Addressing inequities in mental health and addictions.

3.2.1 Principles to guide population health promotion

Health promotion frameworks provide more practical guidance for intervention, with more of a focus on how promotion activities should be conducted. One such framework is the set of principles proposed by Secker.

Secker's principles for health promotion (Secker 1998) provide a useful basis to guide health promotion in such a way that inequities are not increased:

Principles for health promotion (Secker 1998):

- Taking a holistic approach to health;
- Respecting diverse cultures and beliefs;
- Promoting positive health as well as preventing ill health;
- Working at structural not just individual levels; and
- Using participatory methods.

Later in this chapter we show how these principles can be applied to wellbeing to generate a set of best practice indicators for promoting wellbeing; the same procedure could be followed with other mental health-related activities including planning of services.

3.2.2 Addressing inequities

An important point in health promotion is to distinguish between improving health *outcomes* and improving health *inequities*. As the population approach pioneered by Geoffrey Rose has demonstrated, interventions that improve outcomes can sometimes widen inequities, for example if interventions cannot be readily accessed by those who need them most.

This concern has led epidemiologists to propose a more systematic approach in which policymakers consider targeted, universal with additional targeting, redistributive, or proportionate universalism strategies (Benach et al. 2013) when planning programmes and interventions, depending on the requirements of the situation.

3.3 Taking action on the social determinants of health

In this section we examine pathways and mechanisms of the social determinants of mental health challenges and addictions. We present a framework summarising these pathways and consider intervention approaches.

3.3.1 Defining social determinants and health inequities

In this report we use the standard World Health Organization (WHO) definition:

“The social determinants of health are 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.”⁶

3.3.2 What is the value of understanding social determinants?

Social determinants are the main drivers of health inequities. A key point in the definition of health inequities quoted above is that they are differences in health status that are *avoidable*, i.e., they can be prevented. Thus, targeting social determinants is a critical prevention approach for mental health and addiction.

3.3.3 Social determinants as causal pathways for mental health outcomes

The substantial inequities in mental health and addiction problems in this country are a matter of urgent concern. These inequities are described and summarised in the current review, but they are already well known. Although it is important to monitor unequal outcomes in Aotearoa New Zealand and to report on specific populations who are at risk of poor outcomes, this knowledge alone is not enough to guide action.

The key to developing evidence for action is an understanding of *causation*: identifying risk or protective factors which, if intervened on, have the potential to change outcomes. In particular, action on social determinants requires a causal understanding of how social and economic disadvantage gets ‘under the skin’ (R. King et al. 2012) to produce poor outcomes. Effective interventions are those which can draw on highly specific knowledge of this process to identify “when, how, why and for whom do resources truly matter” (Panter-Brick and Leckman 2013).

⁶ This definition and other background information about social determinants of health can be accessed on the WHO website at http://www.who.int/social_determinants/sdh_definition/en/

3.3.4 Social determinants in Aotearoa New Zealand: The role of connectedness and exclusion in mental health and addiction

In this country and elsewhere, economically-based measures such as area deprivation or income correlate strongly with poor mental health and addiction outcomes. However, these measures alone do not fully explain the extent of mental health inequities, particularly among extremely marginalised populations, e.g. persons who are homeless and/or who have a substance use disorder and/or a mental health problem (Aldridge et al. 2017). Similarly, socioeconomic measures do not capture the extent of historical and current disadvantage experienced by Māori and Pacific peoples. There is also substantial research evidence showing that although income is important for families living in poverty, increased income alone is not able to undo all of the harmful effects of poverty on children and their families (Goldfeld et al. 2018; Neckerman et al. 2016).

In the sections that follow, we examine the pathways and mechanisms through which social, cultural, and economic determinants have their effects. There are many pathways, but the single common factor underlying these adverse pathways is one or other type of **exclusion**. As proposed by the wellbeing frameworks shown in this chapter, **wellbeing requires multiple dimensions of connectedness to be present and in balance**; loss of wellbeing can be understood as a loss or absence of connectedness. Valuable insights can be gained by asking questions about how exclusion and connectedness play out in the lives of people and communities. These insights can help policymakers and service providers to understand the causal processes through which structural elements such as policies get ‘under the skin’ to influence mental health and addiction, and provide a systematic way of generating effective strategies for prevention, promotion and support.

Exclusion

“Exclusion consists of dynamic, multi-dimensional processes driven by unequal power relationships interacting across four main dimensions - economic, political, social and cultural - and at different levels including individual, household, group, community, country and global levels. It results in a continuum of inclusion/exclusion characterised by unequal access to resources, capabilities and rights which leads to health inequalities.”(Popay et al. 2008).

Social exclusion leads to profound distress. Neuroimaging studies show that the social pain of exclusion shares neural pathways with physical pain (Eisenberger, Lieberman, and Williams 2003). Aside from the subjective experience of distress, social exclusion can also have critical effects on mental health and addiction outcomes by restricting access to key resources such as employment or mental health and addiction services. For example, in Aotearoa New Zealand the effects of colonisation and discrimination can be seen in every sphere of life and every health outcome. In the

next section we examine mechanisms of exclusion that are particularly relevant to the Aotearoa New Zealand setting.

3.4 Mechanisms of exclusion

Mechanisms of exclusion considered in this section are:

- Colonisation;
- Discrimination;
- Social isolation (loneliness);
- Poverty and economic deprivation;
- Trauma and adverse childhood experiences; and
- The stigma of mental illness.

3.4.1 Colonisation

For Indigenous peoples in Aotearoa New Zealand and elsewhere, wellbeing is essentially relational.

“Relationships don’t just shape Indigenous reality, they are our reality... Rather than viewing ourselves as being in relationship with other people or things, we are the relationships that we hold and are part of.” (Wilson, 2008, p. 80).

These relationships are not restricted to social connections with other individuals and family members, but include connections to land, to language, to ancestors, to communities, to spirituality, to physical wellbeing, and to the universe as a whole (Lynne Russell, pers. comm.). The devastating effect of colonisation on the wellbeing of Indigenous peoples (King, Smith, & Gracey, 2009) can be observed in the multiple ways in which Indigenous peoples have been, and continue to be, disconnected from these critically important relationships (Durie, 2004; Ka’ai-Mahuta, 2011).

In a later section we examine concepts of wellbeing with particular reference to Te Whare Tapa Whā model and the key dimensions of wellbeing identified by this model.

In addition to disconnecting Māori from their culture, another lasting effect of colonisation is the experience of discrimination; this effect is examined in the next section.

3.4.2 Discrimination

Krieger defines discrimination as

“... a socially structured and sanctioned phenomenon, justified by ideology and expressed in interactions among and between individuals and institutions, that maintains privileges for members of dominant groups at the cost of deprivation for others” (Krieger, 2014, p. 650).

In Aotearoa New Zealand, discrimination is an important driver of poor mental health. Racism in particular shapes the life trajectories of the country’s indigenous and migrant populations. In their

analysis of results from the General Social Survey (GSS), Cormack et al. reported that 10% of Māori participants, 9% of Pacific participants, and 14% of Asian participants had experienced racism in the past 12 months, compared to 3% of participants identifying as European/Other (Cormack, Stanley, and Harris 2018). Experience of racism was significantly associated with poorer outcomes on measures of mental health, self-reported health and life satisfaction.

Another important finding from this study was that as well as being more likely to experience racism, Māori, Pacific, and Asian participants in the survey were also more likely to experience other forms of discrimination including discrimination on grounds of age, gender or appearance. Experiencing multiple forms of discrimination was associated with increasingly worse mental health outcomes as the number of discrimination forms increased.

Discrimination on the basis of gender identity or sexuality is a major determinant of health disparities for same/both-sex attracted youth (Lucassen et al. 2014). In the chapter on populations we note that stigma and discrimination are key mechanisms for the high prevalence of distress in several populations of interest to the Inquiry.

3.4.3 Social isolation (loneliness)

Loneliness has been described as “the public health challenge of our time” (Mental Health Foundation and Age Scotland 2017) and is now understood to have a significant effect on both physical and mental health (Hawkey & Cacioppo, 2010). Loneliness, low wellbeing and depression increase one another in a cyclical way, but longitudinal analyses suggest that this relationship is asymmetrical, with the stronger effect being the effect of loneliness in producing depression and low wellbeing (VanderWeele, Hawkey, and Cacioppo 2012; Cacioppo et al. 2011; Saeri et al. 2018).

A recent investigation of reported loneliness in Aotearoa New Zealand suggests that there are different typologies (experiences) of loneliness and that the adverse effect of loneliness on mental health is worse for the ‘superficially connected’ than for typologies with more meaningful connections (Hawkins-Elder et al. 2017). This finding is consistent with other work showing that it is the *quality*, not the *quantity*, of social connections that is meaningful for wellbeing. This insight has practical implications for interventions to reduce loneliness or promote social connectedness and potential approaches are discussed in a later section of this chapter.

3.4.4 Poverty and economic deprivation

Although poverty and deprivation cause mental health difficulties and low wellbeing at any age and life stage (J. Allen et al. 2014), this report focuses in particular on poverty that occurs in early life as it is a major determinant of poor outcomes in New Zealand (Boston 2014). Conversely, optimising

early-life pathways for all children is the most effective and cost-effective strategy for prevention and promotion across multiple outcomes (Center on the Developing Child 2016).

Poverty and disadvantage in childhood have profound effects on children's mental health both immediately and throughout the life course. The physiological mechanisms underlying the effects of poverty are now well-understood through research on the biology of stress (see next section), but understanding the impact of poverty at the social determinants level is also useful for developing policies and programmes to: a) eliminate poverty; and b) ameliorate the stress of poverty among children for whom harmful social exclusion pathways are already operating.

In this country, the mental health of children in poverty is affected through multiple pathways (Kvalsvig et al. 2015). Pathways include (but are not limited to):

1) The environment of relationships:

- a) The direct effect on children of parents' mental health and/or addiction problems, including impaired attachment, witnessing and experiencing violence – all of which may be described as adverse childhood circumstances;
- b) Social isolation related to being unable to participate in activities with their peers;
- c) Perceived stigma of poverty; and
- d) Residential mobility disrupting key early relationships e.g. with early childhood education providers.

2) The physical and chemical environment:

- a) Impact on the intrauterine environment (drugs, alcohol, stress hormones);
- b) Cold, damp housing; and
- c) Homelessness (Note: homelessness includes not only rough sleeping but also insecure and inappropriate accommodation (Bramley et al. 2015)).

3) The nutritional environment:

- a) Hunger; and
- b) Obesity.

All of the above factors are modifiable and can be intervened on to improve mental health over the life course. Toxic stress is the common physiological mechanism underlying many exclusion pathways.

3.4.5 Trauma and adverse childhood experiences

Children develop in an environment of relationships. Responsive early relationships lead to secure attachment and are the foundation of healthy child development, building children's brains by stimulating and shaping connections between neurons (National Scientific Council on the Developing Child, 2004, 2015). When a responsive relationship does not develop, the emerging architecture of

the brain is disrupted and stress pathways are upregulated (Shonkoff et al., 2012). Significant, pervasive stress ('toxic stress') in early childhood results in a heightened response to stress. Persistent fear and anxiety lead to a range of mental health difficulties including depression and poor impulse control (National Scientific Council on the Developing Child, 2014).

A range of barriers can impair parents' capacity to respond; they include conditions such as maternal depression or bipolar disorder that require specific treatment (Earls et al., 2010; Manning & Gregoire, 2009). On the other hand, individuals who have survived difficult early childhood experiences to become healthy adults are diverse in many ways but tend to have one thing in common: there was at least one adult who was a constant and supportive presence in their life. Thus, the mental health of adults and children in a family is strongly linked, and these pathways form the basis for intergenerational transmission of risk.

Childhood trauma can include experiences of emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect (Viola et al. 2016). Life course research shows that adolescents and adults with a history of adverse childhood experiences have a higher probability of risky drinking and gambling, depressed affect, suicide attempts, multiple sexual partners, sexually transmitted diseases, smoking, alcoholism, and physical health problems (for example heart disease and autoimmune disorders) (Dube et al. 2003). Risk is often cumulative, with poorer outcomes for individuals experiencing multiple risks (Danese, TE, Harrington, et al, 2009).

Individuals can experience trauma at any age as a result of being exposed to or threatened by death, serious injury or sexual violence (Kantor, Knefel, and Lueger-Schuster 2017). In Chapter 4 of this review we discuss specific populations who commonly report such experiences, including veterans and refugees.

3.4.6 Stigma of mental illness

Stigma is characterised by "difficulties of knowledge (ignorance or misinformation), attitudes (prejudice) and behaviour (discrimination)" (Henderson and Thornicroft 2009). It may occur at the institutional, community or individual level (Henderson, Evans-Lacko, and Thornicroft 2013).

Discrimination has been introduced in an earlier section in relation to ethnicity and gender, but discrimination on the basis of mental health challenges is also common in Aotearoa New Zealand society, as evidenced by findings from the 2016 New Zealand Mental Health Monitor (Kvalsvig 2018). Participants were asked "If you were diagnosed with a mental illness, who would you tell?" The responses indicated that while 85% would tell family and whānau, around half (51%) would tell a health professional and only 20% would tell an employer. The Respect Costs Nothing survey (D. Peterson et al. 2004) found that respondents had experienced mental health-based discrimination in

multiple settings, including family/whānau and community, employment, education, housing, accessing social support, engaging with financial institutions, and mental health services themselves. Reluctance to disclose a mental health diagnosis was common and was often based on negative personal experiences of doing so in the past.

Another harmful consequence of experiencing discrimination is the amplifying effect of self-stigma, in which stigmatising beliefs become internalised and lead to further exclusion (Watson et al. 2007).

Reduced access to mental health services is a particularly harmful consequence of stigma. Henderson et al. identified four main mechanisms through which stigma can block access to appropriate care (Henderson, Evans-Lacko, and Thornicroft 2013):

- 1) *“Lack of knowledge about the features and treatability of mental illnesses*
- 2) *Ignorance about how to access assessment and treatment*
- 3) *Prejudice against people who have mental illness, and*
- 4) *Expectations of discrimination against people who have a diagnosis of mental illness.”*

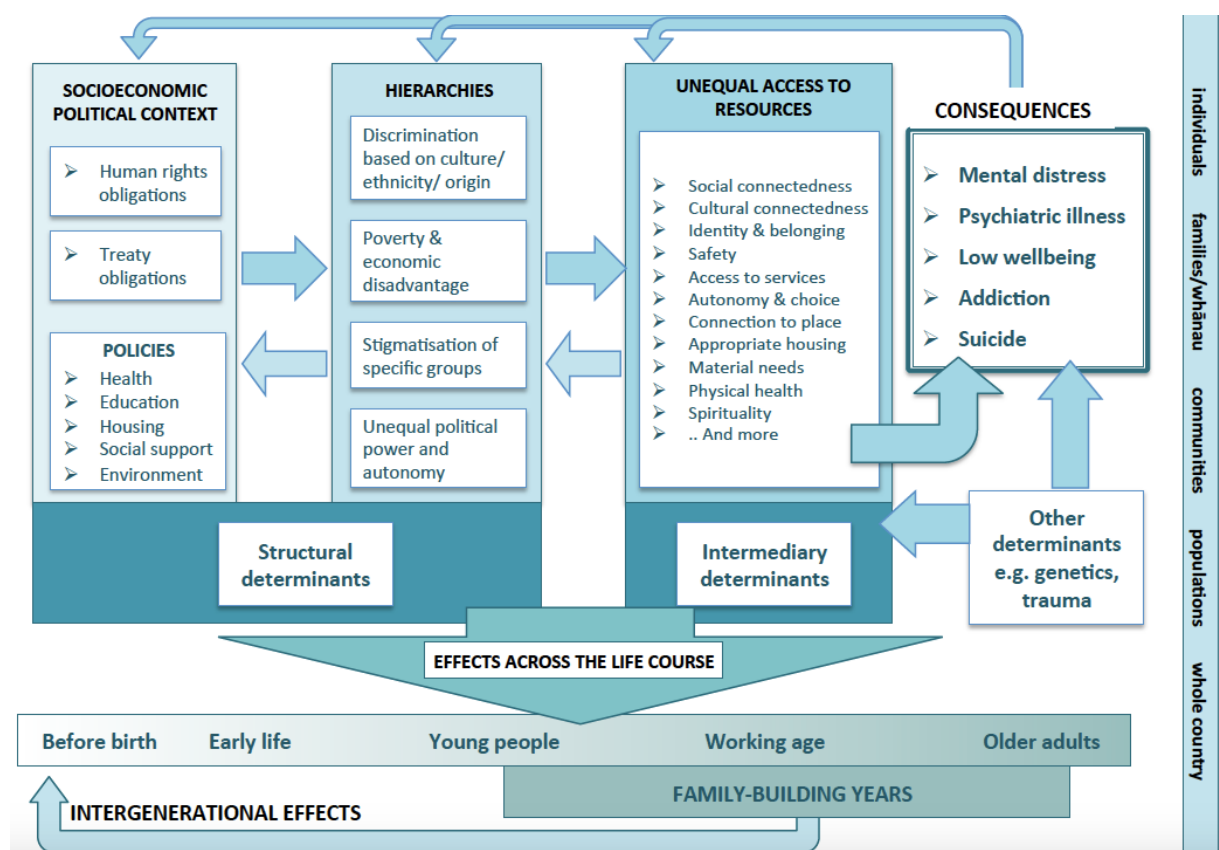
3.4.7 Stigma of addictions

Similar issues exist for people who experience addiction. For example, alcoholism is a particularly severely stigmatised disorder, with alcohol dependent persons being more likely to be socially rejected and at higher risk of structural discrimination compared to other non-substance related mental disorders (Schomerus et al. 2011). Health care professionals in particular commonly hold negative attitudes towards people with substance use disorders, and these attitudes contribute to suboptimal health care and can act as a deterrent to help seeking (van Boekel et al. 2013). Prejudice, stereotypes and discrimination are also commonly experienced from other sources including friends and family, co-workers and employers (Earnshaw, Smith, and Copenhaver 2013).

3.5 Social determinants summary: Conceptual framework

Figure 1 is a conceptual framework for examining the social determinants of mental health outcomes in Aotearoa New Zealand (a larger version of this figure can be seen in **Appendix C**). This framework is based on a conceptual model of the social determinants of health developed for the WHO by Solar and Irwin (2010), but it has been substantially adapted to focus on mental health and addictions, and to acknowledge key determinants in this country such as colonisation and child poverty. Further additions to the model show: 1) the importance of examining mental health across the life-course and taking into account intergenerational transmission of risk; and 2) the multiple levels at which these pathways play out (and consequently, the different types of interventional approaches that may be required).

Figure 1. The social determinants of mental health and addiction problems in Aotearoa New Zealand



Adapted from Solar, O., & Irwin, A. (2010). A conceptual framework for action on the social determinants of health. Social Determinants of Health Discussion Paper 2 (Policy and Practice), 1–75.

Reading from left to right, the model shows how high-level structural factors create hierarchies, that is, systems in which individuals or groups hold unequal power relative to one another. Unequal power results in unequal access to the resources needed to sustain wellbeing and prevent or reduce distress; inequality itself, as well as a lack of resources, acts as a source of distress. It is usually only at

this stage that processes that began as structural imbalances finally become visible to the health system. By this time the cumulative effects of multiple forms of exclusion can result in difficulties that are complex, severe, and intractable.

Moreover, these pathways of exclusion do not only flow from left to right. The reverse arrows in the diagram are a reminder that there are powerful feedback loops in the system. An important example of these cycles is the way that poor mental health is itself a risk factor for further exclusion through mechanisms such as stigma and poverty. Another important cycle is the process of intergenerational transfer of risk through mechanisms such as toxic stress and family poverty.

3.5.1 Implications for action

This model highlights several key principles that are further discussed in this review:

1. There are **multiple opportunities for action** along social determinant pathways. Generally speaking, initiatives that address factors to the left of the diagram are characterised as **universal prevention** or **health promotion** (i.e., they are aimed at the whole population), while initiatives that focus on the centre-right of the diagram are more likely to be based on **selective prevention** (targeting people who are at a higher risk of mental disorders) or **indicated prevention** (targeting individuals with early signs that may be indicative of a mental disorder). Interventions directly addressing the mental health challenges in the 'Consequences' box to the right of the diagram generally come under the umbrella of **service provision**.

However, all of these types of activities are addressing factors that are linked to one another through the pathways, and because of the cyclical nature of the pathways, action at any one point has the potential to support and enhance the effectiveness of action at other points and on other pathways. This is a strong argument for **integrated approaches** to planning interventions, particularly **intersectoral approaches** such as interventions that link housing and health. For example, actions to address the mental health consequences of homelessness might include both national-level changes to housing policy and provision of housing to individuals in need as in the Housing First model (Padgett, Gulcur, and Tsemberis 2006).

2. For clarity, **Figure 1** focuses on mental health-related outcomes as the consequences of the pathways of exclusion shown in the framework. However, these **mechanisms of exclusion affect all aspects of health and wellbeing**. Therefore, another motivation for integrated approaches is to ensure that persons presenting with physical conditions have their mental health needs addressed and vice versa. In the discussion of wellbeing later in this section we propose that wellbeing requires multiple dimensions to be present and in balance; through these dimensions of wellbeing, individuals, whānau and communities experience meaning and purpose in their

lives. Addressing social determinants thus has the potential to support multiple aspects of health and wellbeing, not only mental health and addiction challenges.

3. This framework emphasises the value of a **lifecourse approach**. As discussed in the next chapter, it can be useful to define populations in terms of ages or life stages. This approach recognises the important influence of early environments on life trajectories, and consequently, the value of intervening early in childhood to promote healthy development and address emerging difficulties as soon as possible. Life stage populations are often numerically large populations who can be reached through universal services (e.g. Well Child/Tamariki Ora) or universal platforms outside the health sector (e.g. schools); life-stage populations are thus well-served by national-level and intersectoral approaches.
4. **Stigma and discrimination** are powerful drivers of the adverse pathways in the diagram. As previously mentioned, not only do they have a strong direct effect on how individuals experience their lives, they are also amplifiers in the system because they create feedback loops. For example, stigma reduces willingness to engage with mental health services for fear of discrimination.

3.6 Using the social determinants framework to identify strategies for action

Earlier in this chapter, we outlined key principles for health promotion:

Taking a holistic approach to health;

Respecting diverse cultures and beliefs;

Promoting positive health as well as preventing ill health;

Working at structural not just individual levels; and

Using participatory methods.

In this section we consider how the social determinants framework shown above can be used to identify strategies for action that align with these principles.

Patterns of relationships between elements in the framework suggest several potential strategies for mitigating the effects of social determinants on mental health and addiction outcomes. They include:

- Addressing upstream factors;
- Integrating action at multiple levels and across sectors;
- Focusing on populations;
- Focusing on key points that have cascading effects through the system; and
- Intervening directly on the mechanisms of exclusion.

In the next section, each of these strategies is considered, along with selected examples.

3.6.1 Addressing upstream factors

Upstream factors sit to the left of the diagram in **Figure 1** and include policies, laws, and legal frameworks such as human rights treaties. Addressing these factors has the potential to address pathways of exclusion at their source and to prevent the cumulative effects of distress that are experienced downstream of these factors.

Human rights frameworks for mental health

Human rights are “freedoms and entitlements concerned with the protection of the inherent dignity and equality of every human being” (Hunt et al. 2015). Thus there is a clear synergy between protection of human rights and protection of mental health.

“A climate that respects and protects basic civil, political, economic, social and cultural rights is fundamental to the promotion of the mental health of the population. Without the security and freedom provided by these rights it is very difficult to maintain a high level of mental health” (Gostin 2001).

Aotearoa New Zealand has both domestic and international rights obligations (see Human Rights Commission, 2010 for an overview). The high prevalence of mental distress, addiction, and suicide and inequalities in those outcomes is in itself an indication that the rights of New Zealanders are not sufficiently protected. In addition, international reporting requirements highlight several aspects for improvement. For example, concluding observations on the **International Covenant on Economic, Social and Cultural Rights (ICESCR)**⁷ identified three areas to report back within 18 months. They are:

- Development of a human rights-based housing strategy;
- Progress on reducing family violence; and
- The removal of benefit sanctions.

The ICESCR report also made recommendations relating to mental health, specifically that “the State party take steps to ensure the availability and appropriate provision of mental health services... including prison inmates... [and] the State party ensure that the independent inquiry into mental health and addiction services be provided with adequate resources, and take steps to implement the recommendations arising from the inquiry, once they are available.”⁸

Recommendations were made by the report of the **UN Committee on the Rights of Persons with Disabilities** (2014) regarding mental health treatment in New Zealand. These were:

- Ceasing the use of seclusion and restraint
- All mental health services should be provided on the basis of free and informed consent
- No one be detained against their will in a medical facility on the basis of actual or perceived disability

⁷https://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=E%2fC.12%2fNZL%2fCO%2f4&Lang=en

⁸ ibid pg 9

Similarly, a number of recommendations were made in the most recent report from the **UN Committee on the Rights of the Child**. Recommendations relevant to the social determinants of mental health outcomes included:

- 10a: Develop a **comprehensive mechanism for data collection and an information system on all areas of the Convention**. The data should be disaggregated by age, sex, disability, geographic location, ethnic origin, nationality and socioeconomic background, to facilitate analysis on the situation of all children, and particularly Māori and Pasifika children, children in care, children with disabilities, children living in poverty, refugee, asylum-seeking and migrant children and children in other situations of vulnerability.
- 15b: **Strengthening its measures to combat negative attitudes among the public and other preventive activities against discrimination** and, if necessary, taking affirmative action for the benefit of children in vulnerable situations, such as Māori and Pacific peoples' children, children belonging to ethnic minorities, refugee children, migrant children, children with disabilities, lesbian, bisexual, gay, transgender and intersex children and children living with persons from those groups.
- 17: The Committee recommends that the State party adopt all the measures necessary to protect children from non-accidental injuries and to **prevent, identify and address the root causes of youth suicide, with special attention to Māori children**.
- 19: While appreciating the State party's efforts to **preserve Māori identity**, including through language and television programmes, the Committee is concerned that those efforts remain insufficient and recommends that the State party:
 - (a) Intensify efforts to promote and **foster Māori language, culture and history** in education and increase enrolment in Māori language classes;
 - (b) Ensure that Māori children adopted by non-Māori parents have access to **information about their cultural identity**;
 - (c) Ensure that all government agencies developing legislation and policies affecting children take into account the collective dimension of Māori cultural identity and **the importance of their extended family (whānau) for Māori children's identity**
- Detailed recommendations were made about further measures required to protect children from violence and sexual abuse, anti-bullying programmes in schools, adequate access to age-appropriate mental health services, measures against child poverty, and many more.

The right to the highest attainable standard of health is a central human right (Hunt et al. 2015), but human rights frameworks overall have many applications to mental health challenges and addictions beyond health itself (World Health Organization 2005):

The value of human rights frameworks

Human rights frameworks encode and make explicit a set of shared values and principles;

These values and principles can be used to guide the “design, implementation, monitoring and evaluation of mental health policies, laws and programmes” (World Health Organization 2005);

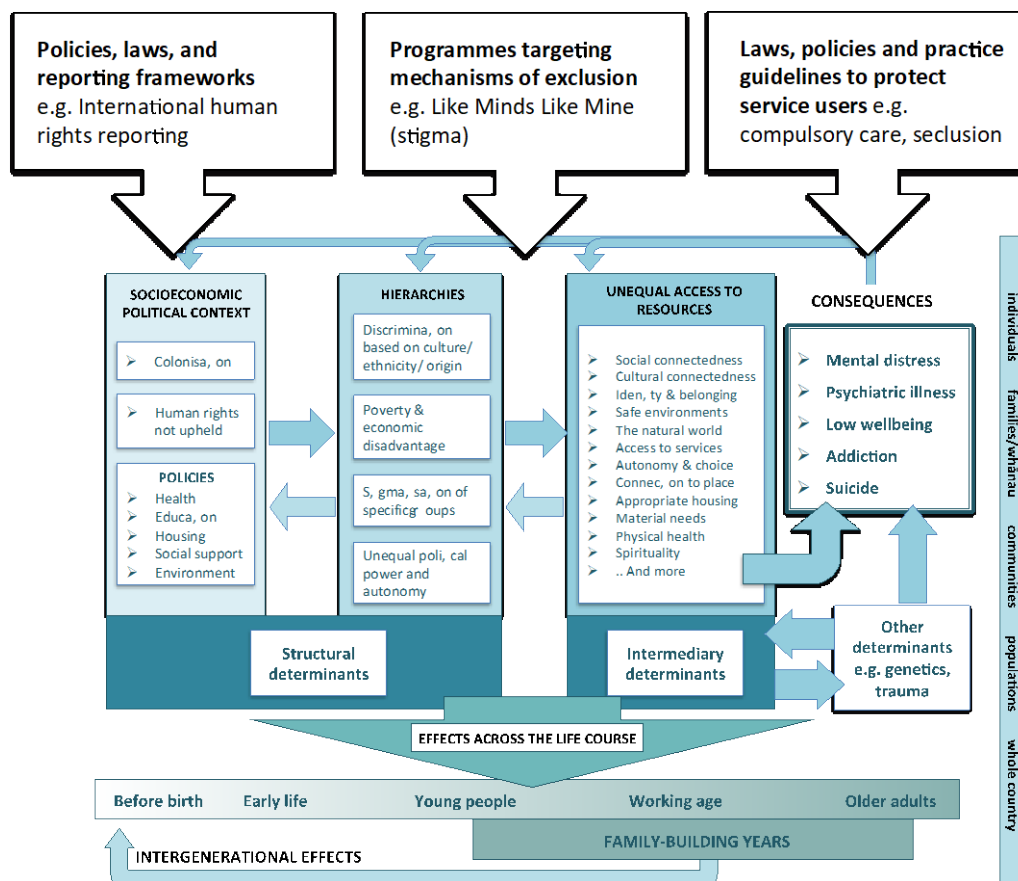
Formal frameworks generate accountability both locally and internationally;

Entitlements granted to individuals and communities place legal obligations on governments and help to equalise power hierarchies;

They can be used to protect specific populations from discrimination (Hunt et al. 2015); and

Because “human rights encompass civil, cultural, economic, political and social dimensions” (World Health Organization 2005) they provide an intersectoral framework to consider mental health.

Figure 2. Using a human rights framework to guide action on social determinants



Te Tiriti o Waitangi

Treaty obligations have a clear relationship with mental health.

The **Ministry of Health** articulates its Treaty obligations as follows (<https://www.health.govt.nz/our-work/populations/maori-health/>):

- **“Partnership** involves working together with iwi, hapū, whānau and Māori communities to develop strategies for Māori health gains and appropriate health and disability services.
- **Participation** requires Māori to be involved at all levels of the health and disability sector, including in decision-making, planning, development and delivery of health and disability services.
- **Protection** involves the Government working to ensure Māori have at least the same level of health as non-Māori, and safeguarding Māori cultural concepts, values and practices.”

Te Ao Māramatanga (New Zealand College of Mental Health Nursing) similarly has developed its principles for practice based on the Articles (Te Ao Māramatanga 2012):

“Article One requires active consultation by the Crown with tangata whenua on issues of healthcare and health service provision.

Article Two establishes the principle of tino rangatiratanga, self determination and jurisdiction for Māori communities and organisations to manage their own health, healthcare, resources and assets.

Article Three guarantees Māori the same rights and privileges of citizenship of all New Zealanders, inclusive of the right to equal access of healthcare services and whānau ora leading to equitable health outcomes.

Article Four guarantees the right of Māori to practice their spiritual beliefs and values.”

The College has a stated aim of reducing health disparities experienced by Māori.

For a detailed exploration of Tiriti-based health promotion which includes specific action points based on the Articles, readers are referred to “Te Tiriti o Waitangi-based practice in health promotion” (Berghan et al. 2017).

Addiction policy

In this country and elsewhere, policy on addiction is evolving towards health and social responses to drugs, reframing issues around illicit drug use away from law enforcement to focus on reduction of harm including social exclusion and mental health consequences.

The principles of this approach, as outlined by the European Monitoring Centre for Drugs and Drug Addiction, are as follows (European Monitoring Centre for Drugs and Addiction, 2017 p15):

“Health and social responses should:

- *Be respectful of human rights, including:*
- *The right to the enjoyment of the highest attainable standard of physical and mental health;*
- *The right of the drug user to give informed consent to treatment;*
- *Respect ethical principles, including informed consent, confidentiality and equity of access;*
- *Promote service user and peer involvement in service design and delivery;*
- *Take a public health approach;*
- *Be based on an assessment of needs and tailored to the specific needs of the target population;*
- *Respond to cultural and social characteristics, including gender issues and health inequalities; and*

- *Be properly designed and based on evidence, duly monitored and evaluated.”*

This approach is clearly in line with principles outlined elsewhere in this chapter, including:

- The principles of health promotion (taking a holistic approach to health, respecting diverse cultures and beliefs, promoting positive health as well as preventing ill health, working at structural not just individual levels, and using participatory methods)
- Human rights frameworks

Closer to home, the New Zealand Drug Foundation has proposed a model drug law.

They propose (New Zealand Drug Foundation, 2017 p1):

- *“Removing criminal penalties for the possession, use and social supply of all drugs*
- *Developing a strictly regulated cannabis market*
- *Putting more resources into prevention, education and treatment”*

In addition to harm reduction as a general approach, the law is explicitly designed to protect young people from harm and to promote equity for Māori.

The object of the **Sale and Supply of Alcohol Act 2012** (SSAA) was safe and responsible sale, supply, and consumption of alcohol and the minimisation of harm caused by its excessive or inappropriate use. Key points included a focus on young people, increased community decision-making powers, and regulating how alcohol is promoted. However there have been criticisms of the effectiveness of devolved policy-making at community levels, with concerns that communities are limited in their ability to implement Local Alcohol Policies as these policies become less restrictive during development, and particularly during appeals processes.

Notably, the 2010 Law Commission report *Alcohol in Our Lives: Curbing the Harm* (Law Commission 2010) recommended more far reaching regulatory measures to reduce alcohol related harm including:

- increasing the price of alcohol through minimum pricing,
- reducing the density of alcohol outlets,
- increasing the purchase age, and
- restricting alcohol advertising and sponsorship.

Aotearoa New Zealand's current National Drug Policy is set to run from 2015-2020 (Inter-Agency Committee on Drugs 2015). In the original policy, four objectives were identified with regard to alcohol and other drugs (AOD):

1. *"Delaying the uptake of AOD by young people.*
2. *Reducing illness and injury from AOD.*
3. *Reducing hazardous drinking of alcohol.*
4. *Shifting attitudes towards AOD".*

Using a harm minimisation approach, three strategies for action were identified: **problem limitation** (reduce harm that is already occurring), **demand reduction** (reduce the desire to use alcohol and other drugs) and **supply control** (prevent or reduce the availability of alcohol and other drugs). While some activities are directed to individuals (for example, encouraging women to abstain during pregnancy and breastfeeding as part of problem limitation), the strategy also identifies five priority areas for government action. They are:

1. "Creating a people-centred intervention system.
2. Shifting thinking and behaviour.
3. Getting the legal balance right.
4. Disrupting organised crime.
5. Improving information flow".

These efforts require multi-agency action; for example, agencies collaborating on alcohol harm reduction include the Ministry of Health, Health Promotion Agency, Ministry of Justice, New Zealand Police, the Law Commission and the New Zealand Transport Agency.

To date there has been one progress report, in 2016 (Inter-Agency Committee on Drugs 2016): this report noted positive results across several areas but also noted a need to develop data collection to monitor progress.

3.6.2 Integrating action at multiple levels and across sectors

Suicide prevention is a key issue that requires integrated approaches.

Suicide prevention can take many different forms. In the 2017 Draft Suicide Prevention Strategy produced by the Ministry of Health (Ministry of Health 2017a), the authors identified several examples of approaches and activities that could contribute to suicide prevention:

Working within major policy and agency sectors such as education, housing, health and social services including public health;

Addressing disadvantage in specific areas such as income support, family and whānau support, and disability issues; and

Promoting Māori and Pacific peoples' development, mental health and wellbeing, and workplace health and safety.

The authors also identified multiple agencies and initiatives with a role in suicide prevention.

Better Public Services;

Bullying prevention;

Ministerial Group on Family Violence and Sexual Violence Work Programme;

The New Zealand Health Strategy;

Activities of Oranga Tamariki;

Positive Behaviour for Learning (PB4L); and

Whānau Ora.

In other chapters we discuss suicide prevention relating to children, youth and older adults, LGBTIQ+ populations, Māori and Pacific peoples; supporting families and friends of persons who have died by suicide (postvention); zero deaths by suicide in mental health services; and availability of data on the incidence of suicide and self harm.

The existence of many types of current and potential suicide prevention activities highlights the need for an integrated approach. The targets approach used by the Better Public Services initiative is one example of purposefully establishing a structure and funding model in which different actors can be drawn together for a common purpose. As seen above, Better Public Services has been specifically identified as having a suicide prevention role.

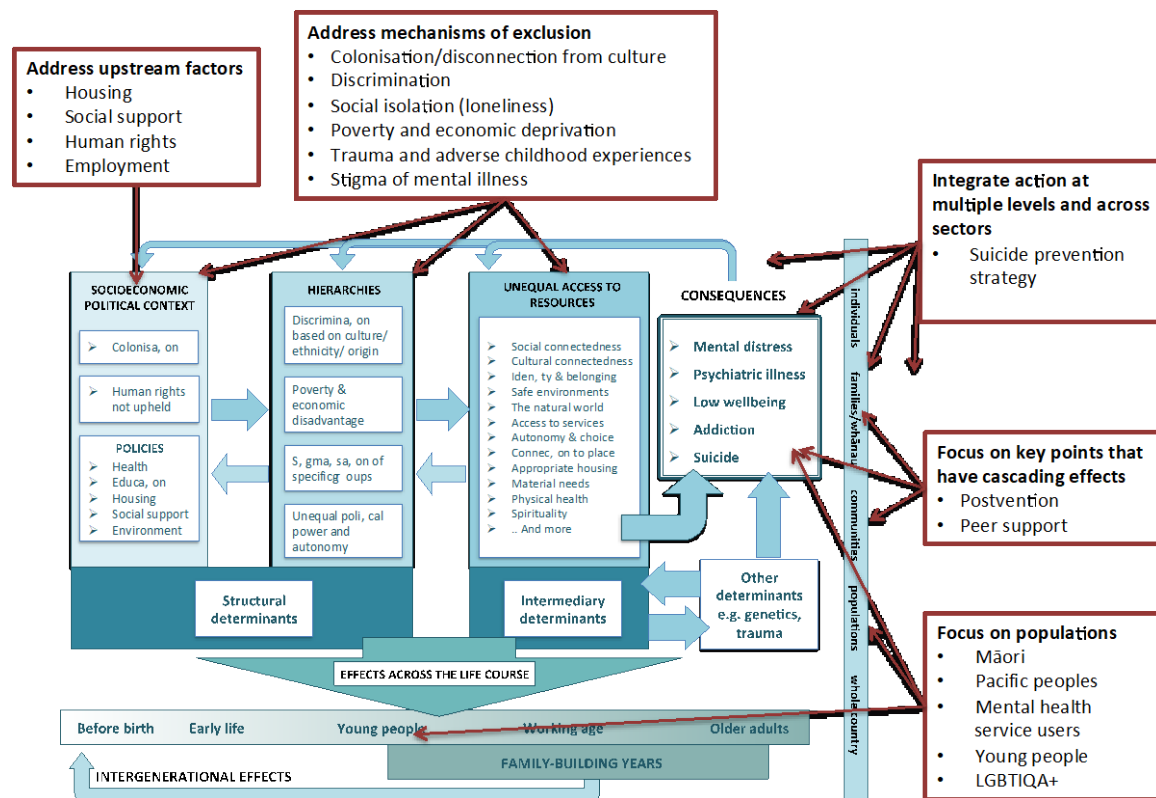
A.1.1.1 Exclusion and connectedness in suicide prevention

It is likely that any policy or programme that reduces exclusion or promotes connectedness has the potential to prevent suicide. As **Figure 3** shows, there are many points at which these pathways can be blocked or facilitated. Particularly promising approaches appear to be prevention and amelioration of social isolation (loneliness) (Whitlock, Wyman, and Moore 2014) and reconnecting young people to their culture (Wexler, White, and Trainor 2015).

In their review cited above, Whitlock et al. propose that increased connectedness could influence suicide thoughts and behaviours in young people in the following positive ways:

- Expanding intergenerational networks (which we would probably express in terms of whānau connections);
- Opening up opportunities for support from other people or from systems such as schools;
- Increasing the chances that distress or suicide warning signs will be seen and acted upon by those around them;
- Exposure to models of positive coping and help-seeking;
- Increasing a young person's experiences of positive emotion, which creates cognitive space for managing distress; and
- Helping young people to experience belonging and a sense of contributing to their community.

Figure 3. Using the social determinants framework to guide action on suicide prevention.



3.6.3 Focusing on populations

Focusing on specific populations is a common approach to addressing the social determinants of health, and populations of interest to the Inquiry are discussed in Chapter 2.

3.6.4 Focusing on key points that have cascading effects through the system

When points in a system have strong links with many other points, these influential ‘nodes’ can be highly effective targets for intervention. One such node is early childhood. The rationale for intervening early in life is twofold:

- Intervening during early childhood is an effective and cost-effective prevention and promotion strategy, with potential benefits across the lifecourse and for the future children of that child.
- Children’s lives and wellbeing are inextricably linked with the lives and wellbeing of those around them; often the best way to promote child wellbeing is to support whānau. In this way, many people can benefit from interventions focused on children’s wellbeing.

Everyone starts life as a child, and universal services (such as Well Child/Tamariki Ora) aim to engage with the family/whānau of every single child born in this country; this universal platform has the potential to effect positive change at a whole-of-population level. However, families who have the most need for support experience barriers to accessing Well Child services and it is essential that mental health-related activities are explicitly designed to address exclusion and reduce rather than exacerbate existing inequities.

Children are further considered in Chapter 4 which examines populations, and the place of children in society is discussed in Chapter 6.

3.6.5 Identifying and addressing mechanisms of exclusion

Sometimes the most effective approach is to address the mechanisms of exclusion directly. This type of action may be targeted at structural elements, but may also address pathways of exclusion at the individual level.

Social isolation (loneliness)

As previously mentioned, loneliness represents a substantial threat to population health. Promoting social connectedness (or reducing loneliness) has the potential to increase wellbeing; it also has the potential to prevent depression (Saeri et al. 2018) and to reduce the risk of suicide in adolescents (Whitlock, Wyman, and Moore 2014). A particular challenge for designing loneliness interventions is that loneliness affects the way people think. The cognitive changes caused by loneliness may lead them to feel more negative about social interactions and to withdraw (and thus to feel more lonely and depressed) (Cacioppo and Hawkley 2009). To be effective, interventions to reduce loneliness therefore need to be able to address these cognitive changes (VanderWeele, Hawkley, and Cacioppo 2012).

In the chapter on populations we consider interventions to reduce loneliness in older adults.

Approaches to reducing social isolation may be highly diverse:

- In a Hamilton-based intervention, migrant women cooked a dish that was important to them and shared it with other migrant women (Longhurst, Johnston, and Ho 2009).
- A study of secondary school students in Southland reported that transport mobility strongly influenced participants' wellbeing; participants who could independently access social networks, key activities and destinations displayed higher independence, happiness and positive social aspects of well-being (Ward, Freeman, and McGee 2015).

These examples show that effective mental health interventions may not be presented as such and may be situated outside mental health services, such as initiatives to support transport mobility for secondary school students in a community.

Poverty and economic deprivation

Child poverty is a policy priority in Aotearoa New Zealand at present: the Prime Minister has taken on the newly-created role of Minister for Child Poverty. An examination of existing and potential policy options for reducing child poverty would be beyond the scope of this review, but the Child Poverty Action Group (CPAG; <http://www.cpag.org.nz/>) and many other agencies (e.g. Boston, 2014) have produced recommendations. These recommendations are focused at the policy level to address drivers of poverty and disadvantage.

By contract, KidsCan (<https://www.kidscan.org.nz/>) is a charity that supplies food, clothing and health-related items to disadvantaged children through schools. The intention of the programmes is to support children living in poverty to participate in and benefit from education. Qualitative reports have been positive (Kids Can 2011) and reported benefits have included an additional positive effect of generating a 'culture of caring' in participating schools alongside the benefits for individual children and their families. However, this appealing co-benefit does not alter the fact that such individual-level support does not address the structural determinants of mental health difficulties for children living in poverty.

Stigma

Like Minds, Like Mine (Ministry of Health and Health Promotion Agency 2013) is an Aotearoa New Zealand-wide programme which has been in operation for over 20 years. The aim of Like Minds, Like Mine is to counter the stigma and discrimination experienced as a result of psychosocial disability and mental distress. It supports a wide-ranging programme of activities, currently with the Health Promotion Agency as the lead operational agency and the Ministry of Health holding strategic responsibility.

Colonisation

Structural approaches to addressing the ongoing effects of colonisation include upholding human rights frameworks and Te Tiriti o Waitangi, as discussed above.

However, community-level activities also have an important part to play, particularly in supporting and restoring cultural connectedness. Such efforts include supporting learners of Te Reo Māori and addressing the effects of discrimination by supporting Māori learners in school settings (<http://tekotahitanga.tki.org.nz/About>).

Cultural connectedness is further considered in Chapter 4.

3.7 Key frameworks and concepts for positive outcomes

The social determinants framework presented in this review is essentially a view of ‘how things go wrong’. However, it is also important to consider ‘how things go right’.

Originating in the field of positive psychology, the dual continuum model of mental health states that positive mental health and mental distress are “separate but correlated dimensions among the population” (Keyes, Dhingra, and Simoes 2010). Empirical evidence (e.g from Keyes’ study) demonstrates that positive mental health can be experienced in the presence of mental health challenges, highlighting the importance of identifying strategies for promoting positive outcomes as well as strategies for prevention.

What positive psychology and quality frameworks tend to lack, however, is a broader vision of ‘the good society’ that is the context for ‘the good life’ (Kvalsvig et al. 2014); thinking about ‘the good society’ requires not only an understanding of the structural determinants of wellbeing, but also about the values that sit behind these structural elements. In Chapter 6 we discuss the question of what a society that values children would look like, using Sweden as an example.

In this section we consider some key frameworks and concepts that can be helpful for considering population-level promotion of positive outcomes. These frameworks and concepts can also help to plan more holistic and integrated approaches to service provision.

We examine two concepts that are distinct, yet are closely linked to one another:

1. Wellbeing.
2. Resilience.

3.7.1 Wellbeing

A number of wellbeing models have been proposed both within Aotearoa New Zealand and internationally. In this section we discuss a selection of these models as examples of varied approaches to wellbeing that are currently under discussion.

Te Whare Tapa Whā

Te Whare Tapa Whā is a model of Māori wellbeing that was originally presented by Sir Mason Durie (Mason Durie 1998b). The model uses the image of a house with four sides, each of which must be present and in balance for the house to be strong. The four sides are:

Taha Tinana (physical health);

Taha Wairua (spiritual health);

Taha Whānau (family health); and

Taha Hinengaro (mental health).

The holistic, relational approach to health expressed in Te Whare Tapa Whā and other Māori models is the basis of many current programmes and services for Māori; this approach helps to rebalance the focus of service delivery away from a single focus on physical or mental health to bring multiple dimensions together.

Te Whare Tapa Whā is further discussed in Chapter 4.

Treasury Living Standards Framework

The Living Standards Framework (New Zealand Treasury 2018) is intended as a key policy framework; the 2019 Budget will be the ‘Wellbeing Budget’. The LSF identifies four ‘capitals’ as a way of organising multiple measures and indicators of intergenerational wellbeing. **Figure 4** shows the four capitals.

Figure 4. The four capitals of intergenerational wellbeing, as proposed by the New Zealand Treasury (2018)



Measures included under the four capitals have been designed to align with existing OECD measures of wellbeing, but also include Aotearoa New Zealand-specific measures. These indicators are likely to evolve over time.

The New Zealand Health Promotion Agency framework for promotion of wellbeing

The New Zealand Health Promotion Agency (HPA) proposes that wellbeing is “what people intrinsically value” (Paper “Defining wellbeing for health promotion: From evidence to action” has been submitted to the Inquiry). Focusing on intrinsic value can help ensure that wellbeing interventions and policies are focused on promoting what is important to people, rather than what is easy to change or measure. It also helps to distinguish between wellbeing itself and resources that can be used to sustain wellbeing. For example, increased family income may be a useful resource but wellbeing is more than access to material resources.

The HPA framework proposes that wellbeing:

- requires multiple, connected dimensions to be present and in balance;
- is primarily about relationships and connectedness (with people e.g. whānau, but also with physical, cultural, environmental, and spiritual dimensions, including connections to place and to history);
- is contextual and culturally defined, and therefore self-determined;
- is strongly expressed through identity, particularly cultural identity;
- is a positive concept, not the absence of chronic illness or psychological distress; and
- should be promoted at multiple levels, including family/whānau, community and structural levels.

This conceptualisation of wellbeing is informed by Indigenous models of wellbeing, particularly Te Whare Tapa Whā. Through their articulation of cohesive, relational models in which multiple dimensions of wellbeing are held in balance, these models are more consistent with the principles of health promotion than models of wellbeing in the health and psychology literature, which tend to privilege individual social-emotional experience at the expense of other dimensions of wellbeing. Focusing too narrowly on individual experience makes it difficult to think about and address the structural determinants of wellbeing (Knifton 2015), whereas a consideration of multiple pathways of connectedness or exclusion makes structural barriers to wellbeing visible, as well as strategies for addressing them.

Aligning wellbeing promotion to the principles of health promotion

Table 1 (from “Defining wellbeing for health promotion: From evidence to action” submitted to the Inquiry by the Health Promotion Agency) demonstrates that the above wellbeing definition aligns naturally with Secker’s principles of health promotion, generating a set of best practice indicators to guide the design of initiatives to promote wellbeing.

Table 1. New Zealand Health Promotion Agency best practice indicators for wellbeing promotion

Principles of health promotion	Best practice indicators for wellbeing promotion
Holistic approach to health	Effective interventions support multiple, connected dimensions of wellbeing
Respecting diverse cultures and beliefs	Wellbeing is culturally and contextually defined, and identity is a key determinant of wellbeing
Promoting positive health as well as preventing ill health	Promotion of wellbeing requires a strengths-based approach
Working at structural not just individual levels	Programmes act at family, community and/or society level; the focus is not just on individuals
Using participatory methods	Participants should determine what wellbeing means to them

Note: The principles of health promotion in the left-hand column are derived from Secker (1998)

3.7.2 Resilience

Like wellbeing, resilience has proven to be difficult to define and promote. Previous definitions of resilience (e.g. in the psychology literature) have depicted resilience primarily as a fixed characteristic held by individuals or communities, i.e. it requires demonstration of successful adaptation to adversity. This approach is somewhat problematic, however:

- It limits assessment of resilience or its lack to those who have already experienced adversity. This retrospective assessment makes it difficult to identify those who are at risk of poor outcomes but who have not yet experienced a sufficient shock to overwhelm their current coping strategies.
- It tends to focus attention on person or group characteristics at the expense of considering structural and environmental determinants.
- It has a limited ability to explain variations in observed resilience between contexts and over time.

We propose instead that **resilience is the process of harnessing resources to sustain wellbeing and reduce distress**. This definition is adapted from the original formulation by Panter-Brick and Leckman (Panter-Brick and Leckman 2013) to include managing distress as well as sustaining wellbeing.

The definition emphasises several important concepts for population mental health:

1. Resilience is a process, not a fixed characteristic. Resilience can vary between contexts and over time, depending on the resources that are required and whether they can be accessed when needed.
2. It is important to consider who is doing the 'harnessing': this may be a person, but also may be whānau, geographically-defined communities or other defined populations, e.g. young people or Māori. Resilience is not just about individuals.
3. In the original definition, Panter-Brick and Leckman gave several examples of resources: biological, psychosocial, structural, and cultural: cultural connection and identity, for example, is an important resource for populations who have experienced colonisation. Resources can derive from multiple levels including individual, family/whānau, community or society. Service provision is an important type of resource for people who experience mental distress. It is therefore essential that services are available to service users to 'harness'.
4. The above definition provides a more cohesive and concrete starting point for promotion of wellbeing and prevention of distress, by directing planners to consider multiple types of resources at multiple levels. Defining resilience in this way allows planners and policymakers to assess resilience and identify who is at risk without waiting for a disaster to happen.

3.7.3 Pae Ora

Pae Ora is a vision of healthy futures (Ministry of Health 2017a). It is a positive framework for action that integrates promotion, prevention and recovery. In this vision, three approaches work together:

- Building positive wellbeing (promotion);
- Recognising and supporting people in distress (prevention); and
- Relieving the impact of suicidal behaviour (recovery).

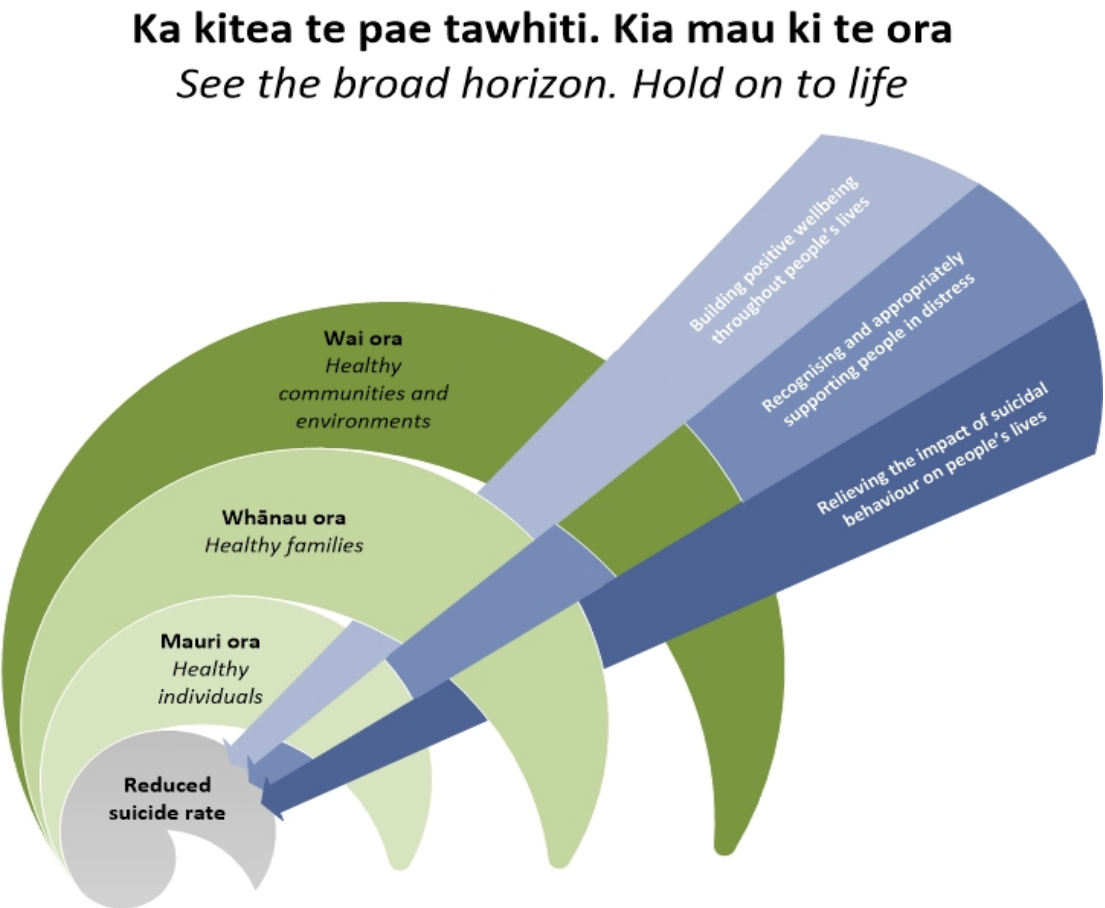
The three approaches act at individual, whānau, and community/environmental levels:

- Mauri ora – healthy individuals;
- Whānau ora – healthy families; and
- Wai ora – healthy environments.

All of these elements are woven together into a cohesive whole.

Figure 5 shows how Pae Ora can be used as a high-level framework for suicide prevention; the same approach could be applied to other challenges. However, it does not identify specific actions and intervention approaches.

Figure 5. Pae Ora: Proposed framework for suicide prevention.



3.8 Putting it all together: From principles to action

We have presented several frameworks in this chapter because there is no single framework that can capture all of the content. We propose instead that moving from principles to action requires a systematic progression along a continuum from highly conceptual understandings to specific action plans that are implementation-ready. Steps along this pathway include:

- 1. Conceptual frameworks that capture optimal outcomes.** These frameworks make explicit statements about values and meaning. They are important in formalising the ultimate purpose of what we do and they help us to recognise ‘what success looks like’. They also have a very important function in keeping action always aligned with values when pragmatic considerations threaten to distort the larger purpose. Examples of this type of framework in this chapter include the vision of an equitable society embedded in human rights frameworks and concepts of wellbeing including Te Whare Tapa Whā.
- 2. Frameworks that answer ‘what’ and ‘how’ questions.** These frameworks express ideas about how things work (whether going wrong or going right) and about how we should act. They should flow directly from the more highly conceptual frameworks, but these frameworks point very strongly towards action, identifying intervention targets and approaches. Examples of ‘what and how’ frameworks in this chapter include the main social determinants framework, human rights frameworks, Te Tiriti-based frameworks, the principles of health promotion, best practice indicators for wellbeing promotion, Pae Ora, and health and social responses to illicit drugs and addiction.
- 3. Action plans, policies and laws.** These frameworks are concrete statements about action to take; once developed, approved and funded, they are ready for implementation. Examples of this type of framework mentioned in this chapter include reporting frameworks for human rights, the model drug law, Like Minds Like Mine programme, and suicide prevention strategies.

These types of framework sit on a continuum and the demarcation line between them is not always clear: a single framework can capture more than one stage along the continuum. What is important is that for each issue in question, frameworks along the continuum form a coherent progression from concepts to action and are always aligned to the values expressed in the overall purpose.

3.9 Reflections and next steps

Policies, programmes and interventions that target the social determinants of health can operate as “ambulances at the top of the cliff” (Porter 2018), targeting exclusion pathways to deliver timely and cost-effective promotion, prevention and early intervention. **Promoting connectedness** in particular appears to be a promising intervention strategy to increase wellbeing and reduce mental distress (Saeri et al. 2018).

Structural determinants of mental health and addiction outcomes can be addressed through multiple, diverse activities such as upholding human rights, addressing child and family poverty, subsidising public transport for adolescents and older adults, or restoring connections to language and culture.

Thus, **effective interventions that improve population mental health may not be mental health interventions as they are traditionally viewed** (Goldfeld et al. 2016) and may not derive from established mental health structures and services; instead, population mental health can and should be promoted at all levels and in every domain of society to address exclusion and promote connectedness.

A major current gap in considering population promotion of wellbeing is the relative lack of measures, concepts and intervention evidence for positive outcomes. **There is a need to develop a ‘social determinants of wellbeing’ framework** to complement the deficit-focused framework presented in this chapter. Such a framework would demonstrate pathways of connectedness to guide action; it would have many similar elements to the exclusion pathways but would not be a precise mirror image.

Developing a structural framework for wellbeing would require us as a society to make explicit the values that would sit behind the framework. These values would inform a concept of optimal wellbeing for individuals that is about more than simply coping and minimising distress (Kvalsvig et al. 2014), and would require a clear understanding of what a connected society would look like and how such a society would promote and protect connectedness at multiple levels and in all of the environments and contexts of our lives.

Chapter 4: Taking action for key populations

Key points

We have grouped the Panel's target populations into three types: people at each stage of the life-course, people sharing a common identity, and people sharing a common experience. The characteristics of each group are outlined below.

For each population group, key concepts of wellbeing and resilience introduced in the previous chapter are drawn on: Wellbeing as a holistic concept primarily about connectedness, and resilience as a process of harnessing resources to sustain wellbeing and reduce distress. Mechanisms of connection and disconnection and resource requirements are explored for each group.

Stages of the life course

Populations defined by their position in the life-course (tamariki, rangatahi, pakeke, kaumatua) are numerically large and some life stages are universal (everyone starts life as a child).

Different preventive and supportive interventions are relevant for different life stages, from antenatal care and parenting support in early life to programmes to combat social isolation in the elderly.

A subgroup of people require targeted input at different stages of the life-course, including parents with substance use and mental health conditions, children with complex health needs, young people and adults in the justice setting, and those with dementia.

Groups sharing a common identity

Experiences of exclusion and discrimination are common for people who share a common identity which is devalued in society, and this is a key cause of mental distress and addiction challenges

Autonomy and self-determination: groups with common identities need to be active participants in society and in health and social care

Appropriate health services will be culturally safe, respectful, affordable and strengths base, whether delivered by mainstream services or providers from the same cultural group.

Groups sharing common experiences

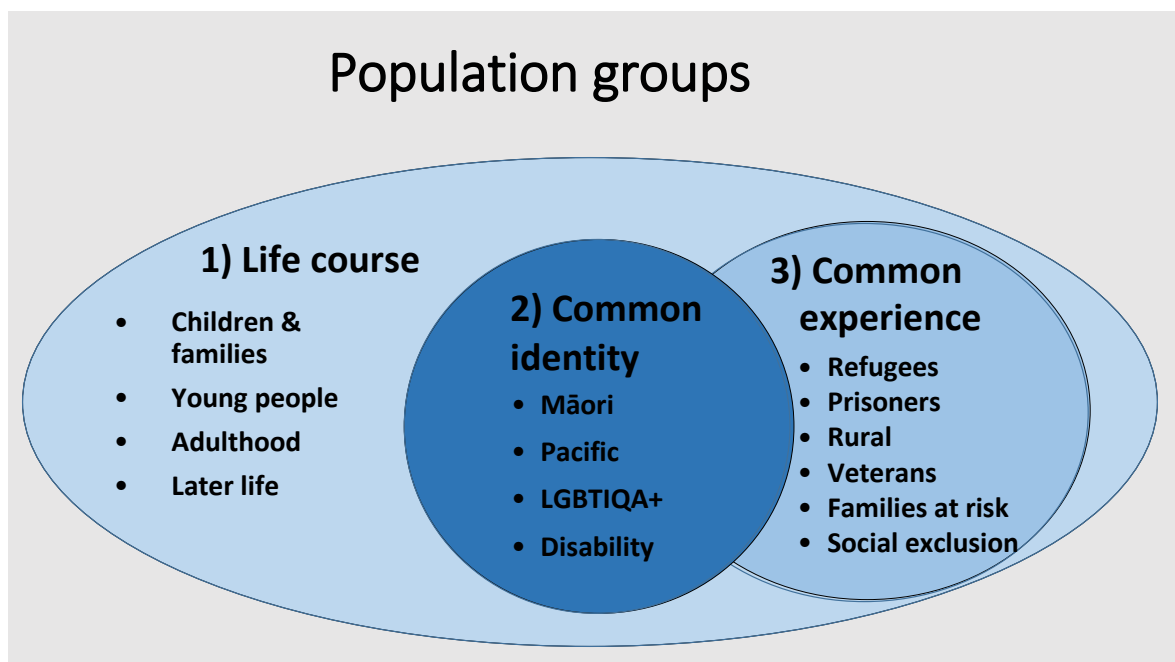
Trauma, isolation and disconnection are key factors for mental health, physical health and addiction challenges amongst groups who have a history of traumatic experiences. Even where experiences are not themselves traumatic (such as living in a rural situation) they may be associated with isolation and disconnection.

Trauma-informed care is an important feature of health and social support for people who have experience of traumatic experiences.

Policy approaches for these groups should focus on minimising and mitigating disconnection.

Figure 4.1 demonstrates the relationship between the three groups: all groups go through the stages of the life course, and an individual may have more than one identity or experience, while common experience and common identity also intersect, so that an individual may belong to multiple different groups.

Figure 4.1 The population groups identified as important to the Inquiry



4.1 Introduction

This section focuses on the populations of particular interest to the Inquiry as identified in the Inquiry Terms of Reference. These populations are: youth, Māori, Pacific peoples, people living in poverty, disabled people, minority and immigrant populations, people from a refugee background, victims of violence, LGBTIQ+ populations, people with a family history of psychosocial disability, prison populations, socially-isolated people, older people rural/farming populations, and veterans.

These population groups are considered here. People living in poverty, victims of violence, and socially-isolated people have been discussed in an earlier section as mechanisms by which social determinants impact on mental health. Here we have specifically considered people who experience extreme social exclusion. We have also expanded the focus on family history to include the family and whānau of people experiencing mental distress and addictions, enabling a broader focus on families and whānau.

There are, however, some cautions to consider regarding the population descriptors in this list.

Interlocking and overlapping populations. These populations are not independent of one another; indeed, because of shared social determinant pathways, individuals will commonly be members of more than one of the above populations. For example, Māori are significantly more likely to experience poverty, and as a result are over-represented in the justice system and among victims of violence. They also, of course, experience challenges common to the different life stages of childhood, youth, and older adulthood. Sometimes it is specifically the intersection of the above populations that is a cause of distress, as seen in the conflicts of identity and belonging reported by takatāpui (Māori who also identify as LGBTIQ+). Intersectionality and accumulating risk are therefore important factors to take into account in policy and planning.

Defining and focusing on high-risk populations therefore has both advantages and disadvantages. While this strategy allows decision-makers to direct resources efficiently to populations identified as high need, it also risks perpetuating current fragmented approaches to mental health. Additionally, a focus on vulnerable populations rather than on underlying causes as descriptors of risk can stigmatise members of those populations, particularly if central aspects of identity such as gender or ethnicity are presented as 'risk factors'.

Difficulties in obtaining reliable information. Obtaining reliable information to understand the needs of different sectors of the population is the first challenge. Age, gender and ethnicity are recorded on most collections of information. However, neither gender nor ethnicity statistics are collected by using a gold-standard process of supporting individual self-identification, because of how the

information is collected and/or the options presented. For some groups joined by a common experience, some information is available about that common experience (for example: lists of prisoners and returned service people, visa information for refugees and migrants), but this information may well not be linked to any information about mental health and wellbeing. For some groups we may have information that relates to the provision of a particular service (for example gender reassignment treatments), but only for those who seek out and are deemed eligible for this service. And for other groups we know almost nothing, except where individual surveys or studies have focused on this group. For example we know almost nothing at a population level about the mental health and addiction challenges of disabled people. Similarly we do not know about adverse childhood experiences for disabled people.

Different types of populations

- Populations defined by their position in the life course (e.g. children, youth, parents, elderly people).
- Populations defined by an innate aspect of their identity, which might be their ethnic or cultural identity (e.g. Māori, Pacific peoples and other minoritised ethnic groups) or other aspects (e.g. LGBTIQ+ populations or persons with a disability).
- Populations defined by a common experience or set of circumstances (e.g. refugees, migrants, prison populations and other persons involved in the justice system, homeless persons, rural and farming populations, and veterans).

Using these three types of population, we will explore some of the factors which are important to consider in any efforts to promote and support mental health and wellbeing for particular groups in Aotearoa New Zealand society. In considering the life course, we have gone beyond the Inquiry identified groups to consider other important stages of the life course and thus capture the entire Aotearoa New Zealand population. For the identity and experience populations we have focused on the groups identified by the Inquiry Panel, but recognise that there are other groups for whom similar issues exist and on whom there may be a focus in future.

For each population group identified, this chapter provides a brief overview of what is known about mental health and addictions for this group in Aotearoa New Zealand, what the important areas for action are for this group in the areas of prevention and responding to mental health and addiction needs (based on a rapid review of the literature), some key things happening in Aotearoa New Zealand for this group, relevant recommendations from local and overseas reports, and key areas for future focus. In the interests of brevity each section provides a very high level overview with references to key documents.

4.2 Life course

A life course approach frames human development as moving through certain life stages and milestones, such as pre-conception, conception, early childhood, and so on. Benefits include: recognising the influence of early life on later outcomes, the power of early intervention and the importance of transition points, such as moving from school to work (Gluckman 2017a).

Across the life course from early life to late life, the various stages are characterised by differing needs, and differing settings for preventive interventions or responses to needs. In this report we discuss four distinct life stages: Tamariki and whānau (Children and families); Rangatahi (Youth); Pakeke (Adulthood) and Kaumatua (Later life). As discussed, these intersect with other ways of grouping people, such as ethnic identity or common experiences.

4.2.1 Tamariki and whānau – Children and families

What do we know?

Far too many children in Aotearoa New Zealand are affected by mental health challenges (Gibson et al., 2017). Common adverse circumstances that contribute to mental distress include poverty, hardship, maltreatment, and living with parents who have mental health and addiction challenges. Childhood poverty, for example, is associated with higher likelihood of mental health challenges in childhood and throughout life (Gibson et al., 2017). Aspects of poverty that affect children's mental health include: inadequate housing, parental stress, adverse events, and limited access to mental health services.

Parental mental health challenges and substance use during pregnancy, and in the period after a child is born, can disrupt the attachment process and have negative implications for the child's social and emotional development. This can impact on their mental health throughout life, as well as impacting on the parent's ongoing wellbeing (Center on the Developing Child 2016). Alcohol use in pregnancy, particularly in the early stages, can lead to developmental and neurological problems (Potter et al., 2017).

Growing Up in New Zealand, a longitudinal study of families, is producing important insights into early life and families (Morton et al. 2017). The latest report found:

- One in five mothers experienced symptoms of depression – either in pregnancy, post-birth, and/or when their child was four years old (Morton et al. 2017).
- Initial analysis linking the data from the Growing Up cohort with B4 School Check data suggests some of the most vulnerable children may be missing out on this critical pre-school developmental check (Morton et al. 2017).

Traumatic experiences such as exposure to violence early in life are a major contributor to mental health challenges and addictions both in childhood and throughout life (Whitaker et al., 2006). Family violence in Aotearoa New Zealand recognised as a large and growing problem. In 2016 the Aotearoa New Zealand police investigated 118,910 reports of family violence, and Child Youth and Family received 142,249 care and protection notifications (New Zealand Family Violence Clearinghouse 2017).

What can be done to promote mental health and prevent mental health and addictions challenges?

Adverse prenatal, infant, and childhood experiences contribute to poorer mental health/addiction and physical health problems in adolescence and adulthood (Gluckman 2011). Early childhood therefore provides a crucial 'window of opportunity' where interventions can improve long-term trajectories (Fox et al. 2015). International research suggests that investment in early interventions has economic benefits that outweigh the costs of those interventions – and has multiple, far-reaching positive consequences (Gluckman 2011).

Promotion and prevention at the environmental level

Policy- and structural-level actions: There is strong evidence that addressing the causes of underlying risk factors such as child poverty can reduce incidence of mental health and addiction challenges throughout life (Gibson et al., 2017). Experts argue that taking action to reduce adverse childhood experiences (ACEs) may be “the best chance for prevention” as these are such a major risk factor (Jorm & Mulder, 2018). Addressing adverse family circumstances, such as family violence, also has the potential to prevent parental perinatal depression and anxiety (Howard et al., 2013). Prioritising children in policymaking, e.g. Children in All Policies approach taken in Scandinavian countries, is recommended (Scott 2014). Sweden’s approach to prioritising children is discussed in Chapter 6 of this report.

Specific policy-level interventions in the earliest years of life include: financial support for families (e.g. child support and poverty reduction payments); provision of universal early childhood education; and other policies to support families, parenting and child development, such as subsidised childcare, paid parental leave and family-friendly work policies.

Changing social norms to support parents and positive parenting is also considered important in reducing child maltreatment. For example, the US Centers for Disease Control and Intervention have reported evidence of positive results from support campaigns and community-based strategies to change public thinking about child abuse (Jorm & Mulder, 2018).

Policies to reduce the availability of alcohol and other substances are effective (Quigley and Watts Ltd 2015), and can impact positively in this life stage through reductions in alcohol and other substance use in pregnancy.

Promotion and prevention in family and home settings

Extensive evidence supports the effectiveness of parenting programmes and other family-centred interventions in promoting wellbeing and preventing mental distress in children and parents.

Strengths-based parenting programmes have been shown to improve multiple outcomes, including conduct disorder and parental mental health (Faculty of Public Health and Mental Health Foundation 2016). Key components of effective programmes include taking a ‘family systems’ approach to address the quality of all relationships within the family (Goldie et al., 2016).

Examples: Triple P and Incredible Years are two examples of robust evidence-based programmes implemented widely in Aotearoa New Zealand. Both are supported by RCT evaluations. Supporting Families, Healthy Children is gaining momentum via Werry Workforce Wharaurau. Other promising examples internationally include Strengthening Families Strengthening Communities, Family Nurse Partnership Programme, the Solihull Approach and Mellow Parenting.

Targeted prevention for children of parents with mental disorders: Various cognitive, behavioral and psychoeducational interventions have been reported as preventing mental disorders and symptoms in these children (Siegenthaler et al., 2012).

Programmes for families affected by addictions and substance use have shown success at reducing subsequent substance use in young people (Buhler and Thrul 2015).

Antenatal and early parenting support: Studies report that both universal and selective infant programmes can improve both parental and infant mental health (Faculty of Public Health and Mental Health Foundation 2016). Assistance and support for first-time parents from midwives or home visitors has also been shown to reduce the risk of subsequent substance use in the children (Buhler and Thrul 2015).

Promotion and prevention in other settings

Universal screening for antenatal and postnatal depression in primary care services to facilitate early identification and treatment of maternal mood disorders has a good evidence base and is widely accepted as best practice (O’Connor et al., 2016).

Universal screening of parent responsiveness is recommended by the World Health Organization to identify early signs of attachment difficulties and provide early support (Center on the Developing Child, 2016; Eshel et al., 2006). In Aotearoa New Zealand, screening and support could be

coordinated by universal services including Well Child/Tamariki Ora, using existing visits in the first year of life. A number of attachment interventions have been implemented worldwide, including programmes such as Circle of Security that have been reviewed and trialled in Aotearoa New Zealand (Milford and Oates 2009; Doughty 2007). The most successful interventions are generally those that specifically aim to support sensitive maternal behaviour. What makes this approach particularly promising is how quickly things can change for families: the right support can rapidly increase parent responsiveness and parents can be supported to respond to their babies even in the presence of substantial adversity.

Community approaches to addressing childhood adversity: for example Philadelphia has a city-wide approach, the Philadelphia ACE taskforce which encompasses research on ACEs in the urban context, and a community based collaborative approach across communities, services, and sectors including activities such as professional training and workforce development, community education, and local practical interventions around adversity, trauma, and resiliency (Pachter et al. 2017).

Other interventions supported by evidence or expert recommendations include school-based prevention (whole-school approach, skills-based programmes and bullying prevention – see Rangatahi section for detail) (Quigley and Watts Ltd 2015; European Union 2016; Goldie et al. 2016); Selective interventions in primary health care settings to prevent anxiety in young children (Garcia-Campayo et al. 2015); Training and guidance for primary health care practitioners (e.g. Perinatal Mental Health Training for midwives) (Goldie et al. 2016); Improving integration of physical and mental health in early life (e.g. Integrated Care Pathways) (Goldie et al. 2016); and Improving nutrition and increasing physical activity among children and parents of all ages (Goldie et al., 2016; Molendijk et al., 2018).

What can be done to respond to the mental health and addiction needs of tamariki?

Whānau ora and other integrated approaches

The terms ‘Whānau Ora approach’ and ‘whānau-centred approach’ refer to a culturally grounded, holistic approach focused on improving the wellbeing of whānau (families) and addressing individual needs within a whānau context.

A report on the first five years of Whānau Ora implementation concludes that whānau-centred approaches are effective mechanisms for improving whānau wellbeing, including among whānau previously seen as ‘hard to reach’. Te Puni Kōkiri has noted there is a need for further research to understand the full impact on whānau of whānau-centred practice, including the benefits and contribution to socio-economic outcomes. Critical analysis is also needed to identify best practice in whānau-centred models (Te Puni Kōkiri 2015).

The most recent annual review of the initiative at the time of writing reports that over 11,500 whānau engaged with the three Commissioning Agencies across Aotearoa New Zealand (Te Puni Kōkiri 2017). Positive outcomes achieved by whānau include: improved health outcomes through participation in sport and recreation, uptake of vocational training, up to date immunisation, smoking cessation, driver licensing, NCEA achievement, reduction in family violence, debt reduction, employment and improved housing.

The **Wraparound** model of care is an intensive and individualised care planning process for children and young people with severe mental health problems and their families. It originates from the US where it has been shown to be effective, and is now increasingly being used in Aotearoa New Zealand (Shailer, Gammon, and De Terte 2013). There is emerging evidence about the fidelity of delivery of Wraparound in Aotearoa New Zealand (Shailer, Gammon, and De Terte 2017).

4.2.2 Rangatahi - Youth

What do we know?

Youth mental distress is common: High levels of mental distress and low wellbeing in young people are a major concern in this country. We continue to have the highest rate of adolescent suicide in the OECD (Roh, Jung, and Hong 2018). Suicidal ideation and attempts, self-harm and bullying are common experiences for secondary school students (Clark et al. 2012). Surveys indicate that between a third and half of 12-18 year-olds have intentionally harmed themselves at least once (Fitzgerald and Curtis 2017, Garisch and Wilson 2015).

Aotearoa New Zealand youth are more likely than older age groups to report symptoms of depression, anxiety, and psychological distress (Kvalsvig 2018). Internationally, more than half of adult mental disorders begin before the age of 14 years, and 75% by 18 years (West Midlands Academic Health Science Network 2017).

Social isolation is common: Social isolation and feelings of worthlessness are strong drivers of distress for young people. Results from the New Zealand Social Survey and the New Zealand Mental Health Monitor (Kvalsvig 2018) indicate that youth are more likely to report feeling isolated than any other age group.

In the 2016 Mental Health Monitor, over half of all respondents aged 15-24 years reported they had felt isolated from others during the previous four weeks, and 17% reported feeling both isolated and that they did not feel that the things they did were worthwhile.

Taken together, the results of recent studies and monitoring suggests that the connection and wellbeing needs of adolescents and young adults in Aotearoa New Zealand are not being met at

present. This is despite being more connected using social media but perhaps less connected in person.

Alcohol is the most commonly used substance by young people in Aotearoa New Zealand, with 33% of young people (18-24) reporting hazardous drinking in the 2016/7 Health Survey, the highest rates of any age group (Ministry of Health 2017b). However the use of other substances is also common, with one in three 18-24 year olds reporting having used any drug (excluding alcohol, tobacco and BZP) in the past 12 months in the 2007/2008 Alcohol and Drug Use Survey, with cannabis being the most commonly used drug (Ministry of Health 2010b). Help seeking for substance use among young people is however uncommon (Ministry of Health 2010b).

A significant minority of young people in Aotearoa New Zealand are involved in gambling (in a 2012 survey one quarter of secondary school students reported gambling in the past 12 months), most commonly in the form of bets with friends, Instant Kiwi (scratchies) or card games, with more than 10% of this group reporting indicators of “unhealthy gambling” including being worried about their gambling and trying to cut down (Rossen et al. 2013).

What can be done to promote mental health and prevent mental health and addictions challenges?

Extensive evidence exists for intervening in the adolescence and youth age bracket (World Health Organisation 2013)(McDaid, Hewlett, and Park 2017). Most of the reviewed strategy documents from overseas recommend special focus on preventing and treating mental health challenges early in the life course to build a strong foundation for later mental wellbeing (e.g. Australia, Scotland, the UK, Canada, and the EU).

Promotion and prevention at the environmental level

Policy actions recommended by experts to prevent mental disorders in children and youth include:

- reducing exposure to structural risk factors such as poverty, violence, abuse, social isolation and discrimination, and providing support for families and positive parenting;
- reducing access to alcohol and other drugs - the positive impact of policy and laws to reduce youth access to alcohol is well established, including impacts on depression and suicidality (Quigley and Watts Ltd 2015) (Gluckman 2017b);
- reducing structural barriers to help-seeking and improve service accessibility and responsiveness, and
- broader policies such as parental leave policies, access to quality childcare, affordable transport, and access to recreational areas and safe neighbourhoods (O’Connell, Boat, and Warner 2009; Quigley and Watts Ltd 2015).

Example: In a poverty reduction ‘natural experiment’, researchers studied American Indian youth and families where tribal income and employment had dramatically improved, due to new tribal enterprises (including casinos). Over ten years, a significant decrease in mental disorder symptoms was found for young people in families who had moved out of poverty (O’Connell, Boat, and Warner 2009).

Promotion and prevention in school settings

Extensive evidence shows whole-school approaches and universal skill-based programmes can be effective in promoting wellbeing and preventing and reducing conduct disorders, anxiety and depression (Goldie et al. 2016; European Union 2016; Wahlbeck 2015).

The ‘whole school’ approach includes: a) staff leadership and mental health literacy; b) school health services; c) engagement with parents/families and students; and d) whole-school work to reduce stigma and promote help-seeking (Goldie et al. 2016).

Aotearoa New Zealand evidence: Positive Behaviour 4 Learning is an evidence-based Aotearoa New Zealand example. Positive school climates are associated with fewer depressive symptoms and fewer emotional problems in young people (Superu 2017). Aotearoa New Zealand studies also show that restorative practices, as alternatives to punitive behaviour management in schools, can have positive effects on student behaviour and academic outcomes, particularly for Māori and ‘at-risk’ students (Quigley and Watts Ltd 2015) – see the Māori section later.

Skill-based programmes: The most effective universal school-based programmes incorporate a focus on skills and positive mental health, start early with the youngest children, operate for a sustained time period, embed this work within the school curriculum, and liaise with families (McDaid, Hewlett, and Park 2017). Evidence-based examples include FRIENDS for Life and the Penn Resiliency Programme (Quigley and Watts Ltd 2015).

Aotearoa New Zealand examples: Several early intervention programmes (e.g. Travellers, Kiwi ACE and SPARX) have shown effectiveness in reducing depressive symptoms or emotional distress. All three emphasise skill development. For example, SPARX is a CBT-based computerised interactive fantasy game that aims to treat adolescents presenting with early depressive symptoms in primary care and school settings. SPARX is supported by trial evidence for use with all ethnic groups and adapted for LGBTIQ+ youth (Quigley and Watts Ltd 2015).

Bullying prevention: UK guidance recommends evidence-based anti-bullying programmes as a top prevention investment (Faculty of Public Health and Mental Health Foundation 2016).

Selective prevention: Selective interventions such as targeted health/wellness services for students at high risk of multiple poor outcomes, and providing mental health support to children in state care, also have evidence of effectiveness (Quigley and Watts Ltd 2015).

Programmes outside of education settings

Since many of the most vulnerable adolescents leave school early, interventions are required in other settings. Some out-of-school multicomponent interventions to promote adolescent and youth mental health and wellbeing have shown promise (Barry, Clarke, and Petersen 2015).

The role of positive youth development practices in building resilience and enhancing wellbeing for at-risk youth is supported by Aotearoa New Zealand research (Sanders et al. 2015; Munford and Sanders 2016).

Family-based interventions are associated with modest reductions in anxiety and depressive symptoms (Goldie et al. 2016). Selective interventions with families – focused on child social and problem-solving skills and/or parent management skills – have resulted in fewer negative parent-child interactions and conduct problems at school (Wahlbeck 2015).

Aotearoa New Zealand example: Multi-setting approach

The Prime Minister's Youth Mental Health Project (2012-2016) was a cross-agency project aiming to improve the mental health and wellbeing of young people (aged 12-19) with, or at risk of, developing mild-to-moderate mental health issues. It delivered 26 initiatives funded by four government agencies, including early identification and school-based support. Examples of projects include school nurses, Lifehack, Positive Behaviour 4 Learning whole-school initiative, SPARX and Youth One-Stop-Shops.

Evaluation found that outcomes associated with the YMHP included reductions in clinically diagnosed mental health conditions, less bullying at school and fewer youth suicides.

External economic evaluation showed a positive return on investment of the \$64 million spent from 2012-2016, and a gross economic benefit of \$21,000 to \$30,000, including government cost savings.

Early identification and support initiatives delivered the greatest economic value – e.g. School-Based Health Services, HEEADSSS wellness checks and Youth One Stop Shop initiatives achieved wide overall coverage and moderate impact for moderate cost (Superu 2017).

The evaluation revealed the YMHP was successful in targeting decile 1–3 schools to reach Māori, Pacific and low-SES youth, but the focus on decile meant that some students missed out, particularly

those in middle-decile schools who had less ability to pay for services and less access to support. Various other groups were identified as less well-served by the project, including LGBTIQA+ youth, youth facing trauma or unexpected transitions, and those not in employment, education or training.

What works in responding to youth mental health needs?

Interventions using digital technology

Recent RCT evidence supports internet-based preventive approaches for young adults and in school-based settings. For example, eHealth prevention interventions for anxiety and depression have shown small but positive effects on symptom reduction. There is a need for more research on medium to long-term effects, and on preventing new anxiety and depressive symptoms (Deady et al. 2017).

A recent review of the effectiveness of digital health interventions for children and young people found that there is emerging evidence of the effectiveness of interventions such as computerised CBT in improving outcomes for young people with depression and anxiety, although most research finds that young people prefer face to face support (Hollis et al. 2017). Codesign of app-based interventions with the young people for whom they are designed is one way of ensuring that the expectations and motivations of young people are understood and incorporated (Sarah Elisabeth Hetrick et al. 2018).

Social media: Youth participation in social media communities has found positive outcomes due to the impact on developing and widening social networks and social supports (Faculty of Public Health and Mental Health Foundation 2016).

Examples from the UK: Big White Wall is an online community of people who are having difficulty coping, or feeling anxious, who help each other while being guided by trained professionals. Aye Mind is an online toolkit that aims to improve the mental wellbeing of young people by making better use of the Internet, social media and mobile technologies.

Freely available apps are also support individual interventions such as mindfulness, CBT and positive psychology approaches (Faculty of Public Health and Mental Health Foundation 2016).

Primary care

Barriers to accessing mental health services for young people include internal factors such as privacy concerns, lack of knowledge about where to go and concerns about the attitudes of clinicians, and external factors such as the cost and geographical location of services (Hetrick et al. 2017).

Comprehensive, developmentally appropriate, health care services in easy to access settings have been identified as key to facilitating access to mental health support for young people. The Youth

One Stop Shop (YOSS) model provides health care and support that integrates physical and mental health in community settings. The available data suggests that integrated care services such as YOSS's are accessed by young people who might not otherwise have sought care, and are associated with positive outcomes (Hetrick et al. 2017). This review includes the Aotearoa New Zealand YOSS network. Research in South Auckland confirms the importance of services grounded in their own communities and locations (Fleming, King, and Tregonning 2008). In Australia a nationwide model of Youth One Stop Shops known as 'headspace' has been implemented with good results (Hetrick et al. 2017). Providing care to young people at low or no cost is a key feature of the YOSS model.

Comprehensive health services in schools have been shown to improve access to mental health services for young people (Mason-Jones et al. 2012). Moreover, recent Aotearoa New Zealand evidence has demonstrated that increased levels of services in schools was associated with reduced depressive symptoms in students, with greater levels of nursing hours associated with reduced depression and suicidality (Denny et al. 2017). While mainly focused around adolescents, school based services have the potential to provide mental health support for younger children as well.

Young people with high needs

Youth with dual diagnosis: A recent review of evidence (Brewer, Godley, and Hulvershorn 2017) found mixed results in treating youth with dual diagnoses (mental disorder and substance use disorder), which underlines the challenges in treating youth with complex needs. But the review concluded there is evidence of effectiveness for the following integrated treatment responses:

- Integrated care, with multiple treatment levels (inpatient, residential, intensive outpatient) integrated 'under one roof';
- Combinations of CBT and family therapy, particularly with motivational interviewing and contingency management (well supported by evidence);
- Various psychotropic medication treatments;
- Post-treatment, supportive care has been shown to improve long-term outcomes for substance use disorder; and
- Personalised combinations of evidence-based treatments for specific disorders ('menu-based' treatment, a new emerging area).

Early intervention in psychosis: Services providing intensive support as early as possible for young people who may be experiencing psychosis for the first time have been shown to be effective at reducing the duration of psychosis, reducing hospitalisation rates, improving employment and

educational and other recovery outcomes (Nordentoft 2015; Randall et al. 2015; Wagner et al. 2016). Aotearoa New Zealand has had Early Intervention Psychosis Services since the late 1990s, and there are currently 11 services operating in the larger centers (NZEPI 2017).

Australia is a leader in developing and evaluating the early intervention in psychosis model of care through the EPPICC study and more recently Orygen Health. The Australian model now has close links with primary care (via the headspace clinics) enabling case detection and easy referral (McGorry 2015). Leading Australian youth mental health researcher and practitioner Patrick McGorry argues that this proactive model of intensive early intervention needs to be expanded to other types of mental disorders (McGorry 2015).

Youth justice settings: There is a very high prevalence of mental health conditions and addictions in youth in criminal justice settings. A 2009 Aotearoa New Zealand review of the literature on mental health and alcohol and other drug screening, assessment and treatment for Youth Justice populations (The Werry Centre 2009) concluded that improvement is needed in coordination, integration and leadership of services, availability of specialist staff, level of community support, and providing effective services. The need for standardized tools for screening and comprehensive assessment, effective service delivery models (such as Wraparound, multisystemic therapy, and others), a focus on preventive and mitigating interventions such as parental support programmes, and a focus on transitions back to the community. Systems reform in order to ensure integrated and collaborative services is recommended, with a focus on the child's right to care.

Tackling stigma and discrimination: Successful projects combine various approaches including education, social contact and protest against instances of discrimination (particularly by the media). The strongest evidence is for interventions with a high level of appropriate and relevant social contact and a highly targeted approach with consistent messaging and strategies for changing discriminatory behaviour (Faculty of Public Health and Mental Health Foundation 2016). Young people have been identified as a key target population for interventions. Examples include See Me (Scotland), Time to Change (England and Wales) and Like Minds Like Mine (Aotearoa New Zealand).

What works in preventing addiction among young people?

Environmental prevention includes measures such as alcohol pricing and bans on tobacco advertising and smoking, which have been shown to be effective. Other strategies aim to provide protective school environments, for example, by promoting a positive and supportive learning climate and teaching citizenship norms and values (Buhler and Thrul 2015).

Universal addiction prevention: There is good evidence for the effectiveness of school-based programmes to prevent alcohol misuse including alcohol specific behavioural interventions, life skills

programmes, and classroom based behaviour management. Provision of information alone is not effective, and evidence suggests that education only programmes, such as US based DARE, are ineffective. Drug testing in schools is also ineffective (Buhler & Thrul, 2015; European Monitoring Centre for Drugs and Drug Addiction, 2017). More effective strategies include skills oriented, interactive programmes for drug use prevention, and a combination of preventive programmes, e.g. school based interventions combined with family-based training (parenting, communication, conflict resolution) (European Monitoring Centre for Drugs and Drug Addiction, 2017) .

Community level interventions, particularly ones aimed at reducing alcohol availability, have been shown to be effective, including cooperation between community stakeholders and local alcohol regulators to enforce regulation of sale of alcohol to minors, and restrictions on advertising. However voluntary commitments by the alcohol industry to campaign for responsible drinking have not been effective. Increasing the price of alcohol is also effective at reducing use among young people. (European Monitoring Centre for Drugs and Drug Addiction, 2017)

Selective interventions aimed at youth who are at high risk include school-based life skills programmes with specific indicated elements for older adolescents at high risk of illicit drug use, and community-based responses such as mentoring programmes and multi-component programmes involving families, with provision of a specialist case manager (European Monitoring Centre for Drugs and Drug Addiction 2017).

What works in responding to addiction among young people?

Interventions shown to be effective in substance-dependent adults have only rarely been trialled with young people. A recent systematic review of reviews concluded there is an urgent need to test adult-focused interventions with young people (Stockings et al. 2016). However, some evidence-based effective responses were identified, including: roadside drug-testing and interventions to reduce injection-related harms, lithium for reducing alcohol use in young people with bipolar disorder. Computer-delivered and mobile phone interventions have appeal and promise for use with young people, but research is needed to examine potential efficacy. The review also highlighted interventions that lack evidence of effectiveness, such as interventions to modify social norms and brief psychological interventions to reduce substance use in young people (Stockings et al. 2016).

What works in youth suicide prevention?

As described in the previous chapter, promotion of social connectedness has been proposed as a suicide prevention approach (Whitlock, Wyman, and Moore 2014). Another proposed approach based on Indigenous experience outside Aotearoa New Zealand is to strengthen the cultural connectedness of young people (Chandler and Lalonde 2008; Ridani et al. 2014).

4.2.3 Pakeke - Adulthood

What do we know?

Mental health challenges and addictions occur throughout the life course, with a large proportion occurring in adulthood. For example in Te Rau Hinengaro, adults aged 25-44 had the highest lifetime prevalence of any disorder (at 45.1%) and the highest rate of 3 or more disorders (at 12.3%) of any age group (Oakley Browne, Wells, and Scott 2006b). The 12 month prevalence of any anxiety disorder was also highest in this age group. Patterns of mental disorder in adults differ substantially by sex, with depression and anxiety being more common in women, and substance use being more common in men. And mental disorders and substance use are patterned by socioeconomic deprivation, with higher rates in more deprived populations (Oakley Browne, Wells, and Scott 2006b).

For adults work is important both as a setting for mental health promotion and as a determinant of mental health. Moving into employment is associated with improvements in mental health, while job insecurity and unemployment are associated with a higher mental distress and an increased risk of suicide (Blakely, Collings, and Atkinson 2003). Experience of stress at work is also associated with poor mental health.

Housing is also an important determinant of mental health. Household crowding, insecurity of housing tenure, and housing quality are all determinants of mental health (Howden-Chapman et al. 2011; Paterson et al. 2018). Housing was identified in the recent ICESCR report from the UN as a key area where human rights based policy is needed (Committee on Economic Social and Cultural Rights 2018).

Failure of mental health services to recognise the parental and other caregiving responsibilities of people accessing those services can be detrimental to the effectiveness of mental health care. For example, mental health crisis services in Aotearoa New Zealand have no systematic approach to considering the parental role or the wellbeing of children in the care of the person who is being seen by services (Pfeifferberger et al. 2016).

Promoting mental health and preventing mental disorder and addictions in adulthood

Environmental prevention

Policies and regulations to reduce alcohol consumption, including taxation (Barry et al., 2015; Law Commission, 2010); regulations to reduce access to gambling, particularly pokie machines; and integrated policy approaches (e.g. 'Mental Health in All Policies' approach, recommended by the EU). Housing interventions (such as rental vouchers for tenants) have a positive impact on mental health (Gibson et al. 2011).

EU Example: Mental Health in All Policies is a co-ordinated public mental health programme to implement large-scale promotion and prevention activities, together with investment in mental health services. The approach reflects that many determinants of mental health lie in ‘non-health’ policy domains such as education, employment and community design (European Union 2016). This approach is discussed further in chapter 6.

Workplace-based mental health promotion and prevention

‘Whole workplace’ approaches have been found to be effective, such as that of the UK (Barry, Clarke, and Petersen 2015), which includes core standards for mental health in the workplace and the Healthy Workplace Charter (Public Health England). Also useful are universal prevention programmes to reduce stress among employees (Wan Mohd Yunus, Musiat, and Brown 2018) and supported employment programmes in the workplace (Faculty of Public Health and Mental Health Foundation 2016).

In Australia an integrated evidence-based approach to workplace suicide prevention and mental health promotion has been proposed, with three core elements: “1) protect mental health by reducing work-related risk factors for mental health problems; 2) promote mental health by developing the positive aspects of work as well as worker strengths and positive capacities; and 3) address mental health problems among working people regardless of cause.” (LaMontagne et al. 2014).

In New Zealand the Mental Health Foundation has recently produced Working Well: a workplace guide to mental health (Mental Health Foundation 2016) and other associated resources for mental health promotion in the workplace, based on reviews of the evidence and adapted for the New Zealand context. <https://www.mentalhealth.org.nz/home/our-work/category/44/working-well-guide-and-resources#create>

Integrated, cross-sector approaches to service delivery

Evidence is increasing for integrated partnership approaches to services, across mental health service providers, sectors, professions and organisations (West Midlands Academic Health Science Network 2017). In the UK, there is a strong move to integrate mental health with housing and urban regeneration, such as creating integrated pathways in services and supports, and mental health literacy training for frontline workers in housing and social services (Goldie et al. 2016). City-wide initiatives which include suicide prevention are about communities thriving (e.g. “Thrive London,” “Thrive New York City”, Thrive Guernsey” and Philadelphia’s city wide community initiatives) and Boston’s Thrivein5” aimed at healthy and resilient children: <http://thrivein5boston.org/>).

Mental health prevention in criminal justice settings

Evidence based approaches include early access to liaison and diversion schemes for offenders with multiple needs, implementation of Psychologically Informed Environments, self-management and peer support, exploring use of mindfulness in prisons, and creating pathways for smooth transitions between prison and support in various sectors (Goldie et al. 2016).

Emerging, expert-recommended promotion and prevention strategies

- **Community-based interventions**, such as community empowerment interventions for families in poverty and debt (Barry, Clarke, and Petersen 2015).
- **Income and employment interventions and policies**, e.g. transition programmes to support unemployed people into work, and adequate income support for people unable to work.
- **Interventions to support active commuting**. Active commuting is associated with mental health and wellbeing benefits (Martin, Goryakin, and Suhrcke 2014). Multifaceted approaches are promising for promoting active travel to work (Aittasalo et al. 2017).
- **Bullying prevention** in the workplace setting is recommended by experts, though more research is needed (Gillen et al. 2017).
- **Health-based interventions**, e.g. training primary health care providers in opportunistic prevention interventions for adults, mindfulness-based training to reduce stress, and digital health interventions.

Aotearoa New Zealand example of a community based intervention: The All Right? Campaign was launched in 2013 to support Cantabrians as the region recovers from the earthquake. It came out of the Chief Science Advisor's suggestion that a comprehensive and effective psychosocial recovery programme was needed to support the Christchurch community. All Right? (www.allright.org.nz) is frequently evaluated and has been found to be effective in promoting community wellbeing. Key ingredients that have contributed to the campaign's success include a clear mandate; ongoing funding, research and evaluation; use of established practice models and theories; a diverse, multidisciplinary team; a responsive, adaptable approach; community involvement and trust; and tools to promote engagement.

What works in responding to adult mental health needs?

Increasing access to psychological therapies or talking treatments, alongside or instead of medication, is a focus of work currently underway in the UK (IAPT). This is discussed further in the services chapter.

Exercise. A growing body of literature confirms the positive effects of exercise on mood states such as anxiety, stress and depression, through physiological and biochemical mechanisms. Psychological mechanisms are thought to contribute through distraction and self-efficacy (Mikkelsen et al. 2017). Exercise prescriptions, such as Aotearoa New Zealand's Green Prescription scheme, are one health-sector intervention. Policies to increase physical activity and facilitate active transport are another example intervention (e.g. urban planning and transport policies to facilitate more walking and cycling commuting journeys).

Treatment in the criminal justice system. Evidence-based treatment and supervision practices for co-occurring mental and substance use disorders in the criminal justice system have been found to be effective (Peters et al. 2017).

Closing the 'treatment gap' (where many people with common mental disorders do not receive treatment) will reduce population-level prevalence of mental disorders (Jorm et al. 2017). A review of data from four countries (Australia, Canada, England, the US) found the prevalence of mood and anxiety disorders and symptoms has not decreased, despite large increases in the provision of treatment, particularly antidepressants (Jorm et al. 2017). The authors concluded that this was because much treatment provided fails to meet the minimum standards of clinical practice guidelines and is not well targeted to those in greatest need. The authors argue that reducing the prevalence of common mental disorders will require more attention to both quality of treatment and prevention measures.

Emerging and expert-recommended treatments include stress management techniques such as meditation, Mindfulness, relaxation, breathing exercises, Yoga and Tai Chi.

Individual Placement and Support (IPS) is an evidence based approach to supporting people with long term mental health conditions into competitive employment (Bond and Drake 2014).

4.2.4 Kaumātua - Later life

What do we know about the mental health of older people?

As Aotearoa New Zealand's population ages, older people make up an increasingly large proportion of the population. While the prevalence of common mental disorders declines with age (Oakley Browne, Wells, and Scott 2006b), age-related conditions such as dementia become more common. Moreover, the degree of comorbidity between medical and physical health conditions increases with age. This makes the disconnection between physical and mental health services a more acute problem at older ages. There is some evidence that people with long standing mental health challenges are better cared for by psychogeriatric (older peoples) services than adult mental health

services as they age as these teams are better at managing their physical health (Abdul-Hamid et al. 2015).

Economic hardship and loneliness are two connected mechanisms for poor mental health among the elderly people in Aotearoa New Zealand which are amenable to intervention (Stephens, Alpass, and Towers 2010). Housing is also an important determinant of older people's mental health (Howden-Chapman et al. 2011).

In Aotearoa New Zealand there is a lack of information about specialist mental health care for people over the age of 65. These data are not routinely reported into the PRIMHD collection because of differences in funding mechanisms in different DHBs (personal communication, Matt Dwyer, Ministry of Health, 2017).

What works to prevent mental disorder in later life?

Although earlier stages of life are important, the older years remain a key prevention opportunity, given the ageing population and the complexity of illnesses in older age. Mental and physical wellbeing in later life should become a greater priority for policy action (McDaid, Hewlett, and Park 2017).

Environmental prevention

City-wide approaches that include older people are being used internationally. Creating 'dementia-friendly' communities is a broad intervention recommended by experts (Faculty of Public Health and Mental Health Foundation 2016). This aims to change public awareness and attitudes to encourage shared responsibility in understanding and supporting people with dementia and their families.

Policies to increase carer support are also recommended. For example UK guidance recommends that health and social care providers work together to identify and support carers, especially those aged over 85 (Faculty of Public Health and Mental Health Foundation 2016).

Policies to promote social connectedness of older people are also important. For example a recent evaluation of the UK's free bus pass for older people found the policy was associated with reduced depressive symptoms and loneliness, and increased social participation (Reinhard et al. 2018).

Universal and selective prevention

Evidence-based strategies to **reduce social and emotional isolation** include: befriending and mentoring schemes, self-help peer group support, prescription of social interaction and community referral (Faculty of Public Health and Mental Health Foundation 2016; Goldie et al. 2016). Early evidence suggests that befriending and social participation schemes may also be highly cost-effective

in reducing social isolation and loneliness (Knapp, McDaid, and Parsonage 2011; McDaid, Hewlett, and Park 2017).

Financial supports for older people (such as a universal retirement income) have been found to positively impact mental health (Golberstein 2015).

Interventions to increase resilience among older people have the potential to have mental health benefits, but there is currently insufficient evidence for any interventions (MacLeod et al. 2016).

Health-system interventions

Training for health care professionals in risk identification and early intervention, e.g. Mental Health First Aid training (Goldie et al. 2016; Barry, Clarke, and Petersen 2015); and reminiscence therapy with older people encourages discussion of past events and experiences, often using prompts such as photographs or music (Faculty of Public Health and Mental Health Foundation 2016).

Other strategies for early intervention include creating local service pathways to improve older people's access to stepped care, and brief mental health interventions in acute specialist physical care settings (Goldie et al. 2016).

What works in responding to mental health needs?

Psychotherapeutic approaches

Research suggests psychotherapy is a safe, cost-effective way to reduce depression among community-dwelling older adults with subthreshold depression (Lee et al. 2012). Interestingly, some data suggests higher recovery potential from CBT and psychotherapy interventions among older people, compared with people aged under 65 (Goldie et al. 2016). Reminiscence therapy is also evidence-based (see above).

Integrated approaches

Older people's mental health services benefit from an integrated approach, integrating both mental and physical health care and health and social care.

Increasing access to care

Offering older people with high prevalence conditions – whose positive contributions require respect and protection – expanded access to timely, integrated, effective mental health and addiction, is likely to result in improved outcomes. Local evidence suggests that few older people who die by suicide have accessed specialist mental health services (Cheung and Casey 2014). The inadequate capacity of specialist care to deal with the ageing population has been identified as an area of concern for Aotearoa New Zealand (personal communication, Dr Adam Sims, 2018).

4.3 People who share a common Identity

This section focuses on population groups who share a common identity. This includes groups who share a common ethnic or cultural identity, as well as groups who share other aspects of their lives which can be central to their identity, including people who are same or both sex attracted and/or gender diverse, and disabled people, as well as other groups such as people with shared faith-based or even occupation-based identities.

Shared identity can be a positive resource, providing a sense of connection, a sense of “place, purpose and belonging” that can have benefits for wellbeing (Haslam et al. 2009). However, where the shared identity is as a member of a group which is devalued or excluded by society, there can be negative consequences of such identity for mental health. As noted earlier, stigma and discrimination are key mechanisms for the high prevalence of distress in several populations of interest to the Inquiry.

There is strong evidence that discrimination, including racism, sexism, classism and homophobia impacts on mental health, addiction and wellbeing, as well as on other aspects of health (van Ryn et al., 2011; Kelleher, 2009; Harris, Stanley, & Cormack, 2018; Landrine, Klonoff, Gibbs, Manning, & Lund, 1995). This effect has been referred to as ‘minority stress.’ All of these forms of discrimination involve groups being ranked into social hierarchies and assigned differential value and differential access to power, opportunities and resources. We also know that multiple types of discrimination occur together, with a cumulative negative effect on health (Cormack, Stanley, and Harris 2018). There is now a body of Aotearoa New Zealand research demonstrating the relationship between racism and health outcomes (Harris et al., 2018; Cormack et al., 2018).

For indigenous populations, including in Aotearoa New Zealand, colonisation has led to alienation from land and culture, social exclusion and reduced political voice (Durie 2011). Thus rebuilding social, cultural and resource capital and regaining political voice must be part of addressing the wellbeing needs of indigenous groups. The Turamarama Declaration (Durie 2017) provides a framework for indigenous suicide prevention action at local, national and international levels, including addressing historical injustices.

People experiencing mental distress have been identified as especially vulnerable to social exclusion (Social Exclusion Unit 2004), and experience high levels of stigma and discrimination, including in Aotearoa New Zealand (Peterson et al. 2004). Therefore, any actions to address discrimination in order to promote mental health and decrease addiction must consider the reinforcing nature of the discrimination relating to mental distress and addiction.

Human rights and Treaty rights-based approaches are important for addressing all types of discrimination at the level of society, as was discussed in the previous section. However, action at organisational and interpersonal levels is also important. In particular, discrimination within health services has been identified as an important factor in the relationship between discrimination and adverse health outcomes (AAMC and The Kirwan Institute 2017).

Addressing bias and discrimination by health professionals was the focus of a recent forum run by the Association of American Medical Colleges and the Kirwan Institute for the Study of Race and Ethnicity, and the report of this forum provides extensive advice on best practice for educational and health care institutions (AAMC and The Kirwan Institute 2017). This is also an area of growing interest among Aotearoa New Zealand researchers and medical educators, including addressing ethnic bias (Harris et al. 2018; Pitama, Huria, and Lacey 2014). A new contact-based health care education programme is currently being developed at the University of Otago Wellington using a service user led, human rights and recovery approach to address bias against people experiencing mental distress in medical trainees (personal communication, Dr Sarah Gordon 2018).

In health services, the concept of cultural safety is useful for understanding how services can meet the needs of populations who share a marginalised and devalued identity, while not contributing to the devaluing and marginalisation. The concept of cultural safety has its origins in Aotearoa New Zealand, originating in the work of Irihapeti Ramsden for the Nursing Council of New Zealand in the 1980s. It has subsequently been used in nursing education, and more recently in the education of other health professions. A culturally-safe environment is one that is “spiritually, socially and emotionally safe, as well as physically safe for people; where there is no assault challenge or denial of their identity, of who they are and what they need.” (Williams 1999).

There are also legislative levers for ensuring cultural competence in the health workforce. The Health Practitioner Competency and Assurance Act 2003 requires professional bodies to set standards of cultural competence for their members, while the Code of Health and Disability Services Consumers’ Rights requires services to take into account consumers cultural needs, values and beliefs, that consumers are free from racial discrimination, and that information be provided in a form that is accessible.

Moving beyond providing safe services, there is now a growing movement to fund culturally-embedded services which are designed and led by the people for whom the services are to be provided. One international model of an indigenous peoples health system created and owned by the people whom it serves is the Nuka System of Care in Alaska. Since 1999 the Southcentral Foundation has been providing a tribally owned and managed system of integrated health care, based around the three ‘key points’ of shared responsibility, commitment to quality and family

wellness (Gottlieb 2013). It has a primary focus on building and maintaining relationships, not only between providers and 'customer-owners', but also within and outside the organisation. The model has been successful, with a substantial reduction in hospital stays and wait times for appointments, and very high levels of satisfaction with the service provided (Gottlieb 2013). In New Zealand there is also a move towards culturally embedded services kaupapa Māori and Pacific led approaches, and these are discussed later in this section.

There is also a movement towards mental health services which are consumer/peer led or co-designed by service providers and consumers. This approach is discussed further in Chapter 5.

4.3.1 Māori

This section provides a very brief overview of knowledge about the mental health of Māori and some promising approaches to addressing the unequal burden of mental health conditions in this population.

What do we know about mental health and addictions among Māori?

Te Whare Tapa Whā model of health and wellbeing (Durie 1985) (described in Chapter 1) identifies the four aspects of hinengaro, tinana, wairua and whānau and reminds us not to consider mental health in isolation, particularly for Māori.

Connection and relationships are particularly vital to wellbeing for Māori. Results from Te Kupenga 2013 survey (Statistics New Zealand 2013)⁹ confirm the high importance of whanaungatanga (relationships) to life satisfaction for Māori. In Te Kupenga, this effect was stronger than in other populations surveyed recently (for example, in the New Zealand Social Survey). The 2015/2016 Mental Health Monitors (personal communication L Russell 2018) confirmed the adverse effect of social isolation for Māori, and showed that participants with the ability to manaaki others (help others or receive help from others) were substantially less likely to report feeling isolated. Participants who knew all aspects of their pepeha (iwi, ancestors, hapū, mountain, water, waka) were also significantly less likely to feel isolated. In view of the importance of cultural connectedness, it is concerning that many Māori do not feel connected to their culture. In the 2015/16 Mental Health Monitor, 1 in 5 (20%) of rangatahi Māori (young people) aged 15 to 24 reported that being involved with Māori culture was important to them, yet they didn't feel connected. This high figure contrasts with only 7% of participants aged 25 and over who experienced this unmet need (Hudson, Russell, and Holland 2017).

Māori experience significantly worse mental health outcomes compared to reference populations (usually Pākehā/ NZ European and others who do not identify as Māori, Pacific or Asian). Inequities are present across a range of measures of distress and diagnosed conditions, consistent with a social determinants explanation underlying these findings. These inequities are substantial. In the 2016/2017 NZHS (Ministry of Health 2017b), the prevalence of psychological distress among Māori was almost 50% higher than it was among Pākehā. Rangatahi Māori in particular also experience high suicide rates compared to Pākehā New Zealanders.

Results from the New Zealand Health Survey between 2006/7 and 2016/17 indicated that the prevalence of mental distress and disorder among Māori is not decreasing, with reported prevalence of all the measures of mental distress either increasing or remaining stable over time. The largest

⁹ The most recent data available at the time of writing this report

increases have been in the diagnosed conditions, for example “Mood and/or anxiety disorder” which was reported by 11.9% of Māori participants in 2006/07 and 20.2% in 2016/17. Most of the measures used in the survey report on *diagnosed* mental health conditions. The one exception is psychological distress, which is measured using the Kessler-10 scale. (A K10 score ≥ 12 – the cutoff used by the NZHS – is considered to show a high or very high probability of anxiety or depressive disorder). Despite having a higher probability of scoring in the high-risk category for psychological distress, Māori were 30% more likely than Pākehā to have their mental health condition undiagnosed, arguably indicating unmet need (Lee et al., 2017).

There is evidence that in both primary and secondary mental health services Māori are less well served. In primary care there is evidence that Māori present more often with mental health challenges but these are underdiagnosed (Baxter et al., 2006). In secondary care, Māori are more likely to be admitted to hospital, more likely to be readmitted after discharge, to be secluded during admissions, and treated under the Mental Health (Compulsory Assessment and Treatment) Act 1992 and in forensic services (McLeod, King, Stanley, Lacey, & Cunningham, 2017; Wheeler, Robinson, & Robinson, 2005; Wheeler et al. 2011).

What can be done?

The Puahou plan (Durie 1998a), named after the ‘Five Fingers’ (Puahou) tree, recommends five strategies for Māori mental health. They include the enhancement of a secure cultural identity, active Māori participation in society and in the economy, the alignment of health services to coincide with Māori realities, accelerated workforce development, and greater Māori autonomy and control. Underlying these strategies are themes of Māori-centred values and beliefs, intersectoral collaboration, positive Māori development and the need to link health with the broader arenas of cultural enhancement and socio-economic advancement. These areas are discussed in more detail below with some examples given. These examples are not intended to be exhaustive, but rather to indicate some of the possible approaches in these areas.

It is however important to note that there is a limited evidence base regarding effective strategies for Māori because of a range of factors including a lack of funding for interventions and research, poor research infrastructure, small absolute numbers of events such as suicide resulting in low study power, and often ineffective collaborations between researchers and communities (Hatcher et al. 2017).

Enhancement of secure cultural identity

The particularly strong relationship between social and cultural connection and wellbeing for Māori, and the ties between individual and collective wellbeing, indicate a need to focus on supporting and reinforcing social connections and cultural identity among Māori in order to promote mental health

and prevent mental health and addictions challenges and suicide. Poor mental health and in particular suicides among indigenous peoples have been strongly linked to cultural identity, with cultural alienation and cultural confusion resulting in fragmentation of identity (Lawson-Te Aho and Liu 2010). Therefore indigenous approaches to suicide prevention such as those set out in the Turamarama Declaration (Durie 2017) include directly addressing colonisation through healing the wounds of the ancestors and transferring cultural knowledge, values and language between the generations.

Community development-based suicide prevention initiatives are a strong feature of Māori responses to mental distress and suicide. Waka Hourua is a national suicide prevention programme for Māori and Pacific communities established in 2017, and is led by national Māori health workforce development NGO, Te Rau Matatini, in partnership with national Pacific NGO, Le Va. Waka Hourua has five key components: national leadership; Pasifika and Māori community suicide prevention (led by Le Va and Te Rau Matatini respectively); a contestable fund for one off community grants; and a strategic research agenda to build the evidence base. (<http://wakahourua.co.nz>) Past initiatives such as Kia Piki Te Ora have also taken a community development approach to suicide prevention and have had positive impacts (Kāhui Tautoko Consultancy 2014).

Active Māori participation in society

Active participation includes participation in governance and decision making, including in the health sector, but also active participation in all realms of society including whānau roles and paid employment. Active participation is the opposite of social exclusion, and so is vital for mental health and wellbeing. The foundations of active participation in society are set in early life, including through educational achievement, and so work to improve Māori education outcomes (such as the Te Kotahitanga programme (Bishop and Berryman 2010) which aims to address negative stereotypes of Māori students through professional development of teachers) is key to achieving participation and wellbeing.

Policies and interventions which address job insecurity are also important to wellbeing and participation in society. A series of studies conducted around the closures of freezing works at Whakatu and Tomoana in the 1980s and 1990s demonstrated the mental health effects of job loss on the Māori community, but also the potential to ameliorate the effects with a community intervention (Keefe et al. 2002; Te Rōpū Rangahau Hauora A Eru Pōmare 2000).

Alignment of health services to coincide with Māori realities

Preventive strategies aligned with Māori realities have been demonstrated to be successful. Family-based preventive interventions have been adapted specifically for Māori with some success. For example, Counties Manukau District Health Board has adapted the Mental Health First Aid

programme for Māori, based on an indigenous Australian version. Evaluation found that under the programme levels of mental health literacy increased, stigma/whakamā decreased, and the programme was contributing to referral to mental health professionals (Mitchell 2012). Positive parenting programmes have also been adapted, with positive impacts on Māori and Pacific families and youth (Mitchell 2012).

School-based initiatives specifically for Māori can be effective in preventing mental health and conduct challenges, particularly those that draw on restorative, strengths-based approaches. For example, Kia Whakakotahi (Taita College) aimed to reduce conduct problems among Māori secondary school students by better engaging whānau using a strengths-based approach drawn from the justice sector. Over three years the initiative reported several positive conduct- and attendance-related outcomes for Māori and Pacific students, and a dramatic shift in whānau engagement with school (Quigley and Watts Ltd 2015). Other examples include the Māori and Pacific Education Initiative and Te Kotahitanga (Quigley and Watts Ltd 2015).

In health services, Māori models of health are now widely acknowledged and incorporated into health practitioner education. Incorporation of Kaupapa Māori services within secondary mental health services is now widespread, and models for cooperation between Māori and Western health practices continue to develop. For example Wiremu NiaNia and Allister Bush's book Tataihono: Stories of Māori Healing and Psychiatry details their collaboration as Māori traditional healer and Western-trained Pākehā psychiatrist (NiaNia, Bush, and Epston 2016). Collaboration between Māori and conventional health services has the potential to enhance both services (Durie, 2003).

Initiatives in training of health practitioners can improve responsiveness to Māori clients and whānau. For example the Hui Process and the Meihana model were developed at the University of Otago Christchurch as teaching tools for medical students to translate the concepts of cultural competency into an approach clinicians can use in interactions with Māori clients and whānau (Lacey et al. 2011)(Pitama, Huria, and Lacey 2014). A clinical guide for psychologists has also been developed using the Hui process and the Meihana model in clinical assessment and formulation (Pitama et al. 2017).

Accelerated workforce development

Māori are underrepresented in the health workforce, including the mental health workforce, and are more often employed in support roles than in clinical roles. The 2001 health workforce survey showed that Māori made up 15% of the mental health workforce, but just 6% of nurses, 1.3% of psychologists and less than 2% of psychiatrists (Hirini and Maxwell-Crawford 2002). Te Rau Matatini was set up in 2002 by the Ministry of Health to strengthen the Māori workforce in order to improve Māori and wellbeing. The most recent data show that Māori make up 8% of the health workforce,

but 19% of the mental health workforce and 24% of the addiction workforce, including 14% of mental health nurses, 4% of psychologists and 3% of doctors (Te Rau Matatini 2017). Te Rau Matatini is involved in a wide range of activities including workforce development, learning resources, research and evaluation.

Greater Māori autonomy and control

Greater autonomy and control in the health sector can be provided through ‘by Māori for Māori’ approaches, which are embedded in Māori realities and values. Two examples are Whānau Ora approaches (discussed earlier), and Māori models of mental health service provision.

It has been argued that system change is needed to move to more culturally appropriate approaches to mental health care for Māori, approaches which recognise the importance of relationships and are embedded in Māori beliefs and cultural practices (Rangihuna, Kopua, and Tipene-leach 2018). One such approach is a Māori approach to primary mental health care in Tairāwhiti called Mahi a Atua (tracing the ancestral footsteps of the gods). Māori creation stories (pūrākau) are used as the basis for engagement, assessment and intervention with whaiora (those seeking health) and their whānau. The narratives address conflict and adversity, with the responses of the Atua leading to rebalancing and resolution, articulating the possibility of positive future directions for the whaiora and their whānau (Rangihuna, Kopua, and Tipene-leach 2018).

It has also been argued that systems change is required in the justice sector, as Māori are significantly over represented in the prison population. The work of Moana Jackson on rethinking the justice sector is discussed in the section on prisoners later in this chapter.

4.3.2 Pacific peoples

What do we know about mental health and addictions among Pacific peoples?

Pacific people make up 7% of the Aotearoa New Zealand population. It is important to recognize that the Pacific population in Aotearoa New Zealand is a diverse one, with a large number of different Pacific peoples, including Samoan, Tongan, Cook Island, Niuean, Fijian and Tokelauan, with different languages and cultural traditions and different migration histories and relationships with Aotearoa New Zealand.

However, there are commonalities amongst Pacific cultures. An integrated concept of wellbeing, which does not separate physical from mental health, and which recognises the importance of connectedness rather than taking an individual view, is important for Pacific peoples (Kingi-Uluave et al. 2016). For example in the pan-Pacific Fonofale model of health, created by Fuimaono Karl Puloto-Endemann, cultural values and beliefs form the sheltering roof of the house; family forms the foundation; and four pillars connect family and culture: spiritual, physical, mental, and 'other' factors affecting wellbeing (e.g. gender, age, sexual orientation, social class, education, and employment) (Ministry of Health 2008).

A similarly comprehensive Pacific definition of wellbeing has been developed by a group of Pacific experts, synthesising shared elements from seven ethnic groups (Cook Islands, Fiji, Niue, Samoa, Tokelau, Tonga and Tuvalu). The comprehensive definition of wellbeing was expressed as: "Harmony, peace, balance and abundance in all areas of the individual's and family's lives: the physical, mental, spiritual, psychological and environmental dimensions. Each family member understanding and fulfilling their roles and responsibilities in close and extended families" (Peteru, 2012, p15).

A recent review of the factors associated with youth mental health in Pacific people (including those living in the Pacific and in other countries, including New Zealand) found that spirituality, religion, culture and family underpin their mental wellbeing, acting as both protective and risk factors. For migrant youth, acculturation, deprivation and discrimination were also important factors in mental health (Tucker-Masters and Tiatia-Seath 2017).

Te Rau Hinengaro showed that Pacific people have higher 12 month prevalence (25%) of any mental disorder than the total population (20.7%), and were also more likely to have multiple disorders. Those who were born in New Zealand, had twice the rate of mental disorders compared to those who had migrated after the age of 18. However, Pacific peoples were much less likely to have received treatment for mental disorders, with only 25% of those with severe disorders having received treatment from mental health services, compared to 58% of the general population with severe disorders (Oakley Browne, Wells, and Scott 2006b).

More recent data from the 2015/16 New Zealand Health Survey indicates that Pacific peoples continue to have a high degree of mental distress, with 10% of Pacific adults reporting high levels of psychological distress in the past 4 weeks, a much higher rate than the general population (6%) (Ministry of Health 2016a). In contrast the same data shows that Pacific adults have the lowest rates of diagnosed mental disorder (7% compared to 16% of the total population) and commonly report not being able to access primary health care or pick up prescriptions because of cost. A consistent pattern of high mental health need and low service use has persisted across time. And at the severe end, the rates of hospitalisation for schizophrenia and other psychoses, length of hospital stays, and rates of compulsory treatment and forensic service use are all higher among Pacific peoples than in the general population (Mila-Schaaf and Hudson 2009).

Analysis from the 2015/16 New Zealand Health Monitor and Health and Lifestyles survey has found that Pacific peoples are well connected socially and culturally, although those who are from multiethnic Pacific backgrounds are less well connected culturally (Ataera-Minster and Trowland 2018). As with other data sources, the surveys found that Pacific peoples report higher levels of psychological distress than others, but often do not know where to get help.

Overall, Pacific peoples' suicide rates are lower than Māori and New Zealand European rates. However, suicide rates among Pacific youth (particularly young men) are higher than New Zealand European rates, and decline sharply with age (a similar pattern to that seen among Māori, and in contrast to New Zealand European groups where the rates stay more stable over the life course) (Tiatia-Seath, Lay-Yee, and Von Randow 2017)(Ministry of Health 2016c). Alcohol abuse and problem gambling are also significant challenges in Pacific communities (Ministry of Health 2016a). However, among Pacific youth, rates of addiction behaviors have reduced over time, with significant drops in cigarette, alcohol and marijuana use found in the Youth Health Surveys between 2002 and 2012 (Clark et al. 2013).

What can be done?

The strategies of Puahou (Durie 1998a) also provide key areas for action on Pacific mental health and addiction: the enhancement of a secure cultural identity, active participation in society and in the economy, the alignment of health services to coincide with Pacific realities, accelerated workforce development, and greater autonomy and control.

Addressing the determinants of wellbeing and mental health, including policies to improve housing conditions and financial security, is fundamental to supporting Pacific communities, as is addressing structural discrimination and racism. Managing and reducing the high burden of chronic health physical health conditions among Pacific peoples is also important for mental health. In an examination of Pacific models of mental health service delivery, key factors for recovery were found

to be appropriate family and community support networks, appropriate living environments and meaningful work, as well as access to culturally competent staff (Suaalii-Sauni et al. 2009). In other words, culturally appropriate and culturally safe services are important, but not enough without addressing the wider determinants of wellbeing.

Reducing stigma. The stigma of mental distress is a significant issue in Pacific communities, and can present a barrier to help seeking (Ataera-Minster and Trowland 2018). Initiatives such as Like Minds Like Mine have sought to develop specific approaches to stigma in Pacific communities.

Aligning health services with Pacific realities

Recognising that Pacific peoples are diverse, in terms of culture and language, but also in terms of gender, religious and spiritual affiliation, sexuality, age, birthplace, and other factors is important in the development of appropriate supports and services. Pacific mental health services, services which are founded on Pacific models of health belief and Pacific approaches, have been growing in number and as with Māori services can offer services embedded in cultural values. Given the very low rates of health service access for mental health challenges among Pacific peoples, such services play an important role.

However, it has been noted that the needs of Aotearoa-New Zealand born youth may not be met by services embedded in their parents' values (Agnew et al. 2004; (Mila-Schaaf and Hudson 2009). The concept of 'negotiated spaces', where indigenous references are used as the 'foundation', while retaining the capacity to draw on any and all other knowledge and ways of working, has been suggested as useful way of bridging Pacific and Western paradigms in mental health, while creating a conceptual space to allow for constructive examination of conflicts between the paradigms (Mila-Schaaf and Hudson 2009). Such a model enables dialogue and growth, and may allow for the development of services which meet the needs of a new generation.

Recent research examining success factors for sustainable Pacific mental health services found that effective communication, shared values and beliefs, stakeholder engagement and the strength of relationships were all key to sustainability (Currey 2017).

Workforce

Development of a culturally competent workforce is essential for providing appropriate Pacific and mainstream services. Le Va is a national NGO set up in 2008 to lead mental health and addiction workforce development for Pacific people. It has a dual focus on supporting cultural competence for staff in mainstream services and growing the Pacific mental health and addiction workforce. The national cultural competency training programme Engaging Pacifica is led by Le Va and has been shown to be effective (Faleafa and Pulotu-Endemann 2016). Organisational guidelines are also

provided by Le Va, to support organisations and services to embed cultural competence at every level. The Futures that Work programme is designed to support Pacific people to undertake training and enter the mental health and addiction workforce.

Pacific led approaches

Waka Hourua (discussed above) is a national Māori and Pacific suicide prevention initiative founded in 2014. It has been instrumental in the growth of Pacific suicide prevention and postvention initiatives, as well as community development and the development of a strong research agenda. Suicide postvention research funded by Waka Hourua noted the need for more Pacific-appropriate information and a larger Pacific workforce, recognising Pacific diversity, and the value of family support groups as opposed to groups from the wider community (Tiatia-Seath 2016). Community development initiatives are a key part of Waka Hauora mental health promotion, and have the potential to embed and support the informal sector outside of health services to provide support for Pacific people in distress who are reluctant to access health services.

The concept of *Va*, used in many Pacific cultures to refer to the relational space between people, where the reciprocal flow of interpersonal exchange exists, has been used to characterize the relational and balanced nature of wellbeing for Pacific peoples (Kingi-Uluave et al. 2016). Mana Moana is an indigenous theory of wellbeing developed by Karlo Mila that places relational collectivity at the center of wellbeing, including relationships to the natural and spiritual worlds, and focuses on movements of the *va* (Kingi-Uluave et al. 2016). Mana Moana has been developed into a process for resolving psychological difficulties based on a series of healing stages, processes and rituals drawn from Pacific cultures, and has been made available as an interactive online resource (www.survivingthestorm.co.nz).

4.3.3 Disabled people

What do we know?

In 2013, one quarter of the Aotearoa New Zealand population reported a disability in the Census. Disability is more common at older ages, with 59% of people over 65 reporting a disability, and more common in Māori and Pacific populations (after taking into account differences in the age profiles between ethnic groups) (Statistics New Zealand 2014). Five percent of the population reported a psychological or psychiatric disability. Statistics New Zealand defines disability as “an impairment that has a long-term, limiting effect on a person’s ability to carry out day-to-day activities. ‘Long-term’ is defined as six months or longer. ‘Limiting effect’ means a restriction or lack of ability to perform. People were not considered to have a disability if an assistive device (such as glasses or crutches) eliminated their impairment.” (Statistics New Zealand 2014).

The social model of disability (as opposed to the medical model of disability) focuses on the role of society in disabling individuals with impairments, and therefore on actions to change societal responses to those impairments. The New Zealand Disability Strategy (2016–2026) states that “Disability is something that happens when people with impairments face barriers in society; it is society that disables us, not our impairments, this is the thing all disabled people have in common. It is something that happens when the world we live in has been designed by people who assume that everyone is the same. That is why a non-disabling society is core to the vision of this Strategy.” (Office for Disability Issues 2016).

The UN Convention on the Rights of Persons with Disabilities says that people who are disabled include: “...those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others...” (Article 1) (United Nations 2006).

Te Rau Hinengaro measured disability using the WHO-DAS domains of disability (role impairment, mobility, self-care, social and cognitive impairment) and found a strong relationship between mental disorders, particularly mood disorders, and all domains of disability (Oakley Browne, Wells, and Scott 2006b). Mental and physical disorders occurring together (comorbidity) more than doubled the disability associated with mental disorders or physical disorders alone.

A recent UK study found that disabled people reported worse access to health care than those without, and the gap was largest for “unmet need for mental health care due to cost” where those with severe disability were 4.5 times (95%CI 2.2-9.2) more likely to face a problem (Sakellariou and Rotarou 2017). Overall, transportation, cost and long waiting lists were the main barriers identified, and women were more likely to report unmet needs than men. A 2010 systematic review similarly

found that disabled people face restrictions in accessing health care and report being less satisfied with their care. The authors conclude that complex solutions are needed to address the complex factors (Gibson and O'Connor 2010).

Disabled people have high need of mental health interventions, with higher rates of mental health conditions such as depression, and higher rates of suicidal ideation compared to those who are not disabled (Russell, Turner, & Joiner, 2009; McConnell, Hahn, Savage, Dubé, & Park, 2016; Giannini et al., 2010). Women with disability are more disadvantaged than men (Thomas 2006). The risk of developing dementia at an early age is particularly high among those with learning disabilities, especially among those with Down's syndrome (Lautarescu, Holland, and Zaman 2017). There is however no New Zealand specific evidence.

A review of barriers and facilitators to accessing mental health care for people with intellectual disabilities found that there are substantial gaps in the research evidence for this group. However, barriers identified included organisational barriers, lack of services, and poor-quality services related to lack of knowledge, while interagency collaboration, and training and education of service providers were identified as facilitators (Whittle et al. 2018).

Mental health challenges can therefore be both a cause and a consequence of disability.

What can be done?

Participation in society is an important determinant of mental health. Action to reduce to participation in society, and to address the disabling nature of society in line with the UN Convention on the Rights of Persons with Disabilities, is therefore essential to address the determinants of poor mental health among disabled people. Such action will include laws which prohibit discrimination on the basis of disability and require accessibility of public services and places, including information and communication services.

Participation in employment is key to mental health and wellbeing for disabled people as it is for others. A recent review of EU and OECD evidence of what works to help disabled people into work found that while there is a lack of robust evaluation evidence, there have been positive impacts of policies designed to make workplaces more flexible and accommodating, and financial incentives for employers to employ people who are disabled, as well as intensive personalised support programmes (Independent Social Research 2013). In New Zealand the Mainstream Employment Programme run by the Ministry of Social Development provides salary subsidies, training and support for a two year period to support disabled people into work. Workbridge is an employment agency run by and for disabled people to support disabled people and employers in their employment relationship (workbridge.co.nz). However recent reporting from the Household Labour Force Survey

indicates a very large gap in employment rates and wages between disabled and non-disabled New Zealanders (Statistics New Zealand 2017a). The employment rate for disabled people aged 15-65 was 39% compared to 77% of non-disabled people, and of those who earned wages or salaries, the average hourly wage was \$26.40 compared to \$31.01 for non-disabled people.

Appropriate and accessible health services including mental health and addiction services are also key to supporting disabled people. There is currently no New Zealand evidence about the accessibility of mental health services to disabled persons. International evidence suggests that access to health care is a key determinant of health inequalities associated with disability, including physical and financial accessibility (Krahn, Walker, and Correa-De-Araujo 2015). Appropriate training of health care providers in disability competency is also needed to ensure health services are appropriate when they are accessed, and again international evidence suggests major deficits in this area: for example in the US disability competency is not a core part of medical training (Krahn, 2015). A recent review identified three levels of disability competency training: “(1) basic disability awareness for all public health workers and clinical care providers, (2) discipline-specific training on select aspects of disability, and (3) a needed infrastructure for core leadership training of health professionals in disabilities that addresses the full life span.” (Krahn, Walker, and Correa-De-Araujo 2015).

As with the other groups discussed above, autonomy and self-determination are important for mental health. One model to facilitate autonomy among disabled people is personal budget holding. Personal budget holding or commissioning models for people with complex health and social care needs are being implemented in the UK and Australia, and starting to be implemented in New Zealand. In the UK, the Integrated Personal Commissioning programme (www.ipcprogramme.org.uk/) links health, social care and education (where relevant) funding for individuals with complex, long-term needs, and aims to fully involve individuals and families in planning their care and support people to self-manage their condition in order to improve the quality of life of people with complex needs (Mays, Jones, and Mounier-jack 2016).

In Australia, the National Disability Insurance Scheme (NDIS) was launched in 2013, and aims to give participants greater choice and control over the services they receive. It is a complex system and there have been a number of implementation challenges (Carey et al. 2018). Australian researchers have recently voiced concerns that “market based approaches such as the NDIS have the serious potential to entrench or even widen inequalities” (Carey et al. 2017).

In New Zealand the “New Model” (<https://www.health.govt.nz/our-work/disability-services/disability-projects/new-model-supporting-disabled-people>) is an approach to disability support services which aims to provide more choice and control to individuals over the support and

funding they receive. This model has been piloted at demonstration sites. Evaluation to date has not specifically considered the mental health or equity impacts of the New Model, both of which will be important outcomes to understand. Support for caregivers and supporters of disabled people, in order to maintain social connectedness and mental health for both the person who is disabled and their supporters. Evaluation of the New Model will also need to consider the impacts on supporters.

Note: May 2018: *The New Model is no longer being implemented and is now part of a wider disability support System Transformation project, which in turn is part of Enabling Good Lives, an inter-sectoral initiative aiming to give disabled people and their families and whānau greater choice in their lives and supports* <http://www.enablinggoodlives.co.nz/about-eql/> .

Data is needed to drive policy and practice, including standardised measures of disability across existing datasets to track access and outcomes (Krahn, Walker, and Correa-De-Araujo 2015). There is limited very little information available about the mental health of people who are disabled. The New Zealand Disability Survey is a population based survey of a sample of people who answer yes to having a disability in the census, and includes a survey of people in private dwellings and people in residential facilities. The 2013 survey aimed to collect information on the type and severity of disability experienced, supports received, and outcomes for people experiencing disability (although the reporting has focused on type of disability and demographic spread) (Statistics New Zealand 2014). The survey is due to be repeated in 2023. Including more information on wellbeing in the disability survey would enable a better understanding of the relationship between disability and wellbeing and the monitoring of changes over time as legislative and other societal measures are taken.

Statistics New Zealand has recognised the need to collect better information about disability in order to understand how well society is meeting the needs of disabled people and to meet international obligations, and to do this has incorporated a short set of questions about disability (the Washington Group Short Set Questions) into the General Social Survey (GSS) and the Household Labour Force Survey (HLFS) since 2016/17, and is considering introducing these measures into the census (Statistics New Zealand 2017b). Similarly, the routine collection of information about how well mental health and addiction services are performing for disabled people would enable accountability and quality improvement.

4.3.4 LGBTIQ+ populations

What do we know?

LGBTIQ+ or “rainbow” communities are a diverse grouping, and it is useful to be clear about the range of identities included. In a submission to the Suicide Prevention Strategy Review a group of organisations and individuals working to support the mental health of rainbow communities in New Zealand provide the following definition of rainbow communities:

“We are using *rainbow* as an umbrella term to describe people who do not identify as heterosexual, do not fit typical gender norms, and/or were born with bodies that do not match common biological definitions of male or female. This includes a range of identities and experiences, and encompasses:

- *Sexual orientation* other than heterosexual (for example gay, lesbian, bisexual, takatāpui, queer, pansexual)
- Diverse *gender identity* (for example trans, transgender, transsexual, takatāpui, whakawahine, tangata ira tane, fa'afafine, fa'afatama, genderqueer, fakaleiti, leiti, akava'ine, fakafifine, vakasalewa, FtM, MtF, non-binary)
- Diversity of *sex characteristics* including genitals, gonads or chromosome patterns (intersex)

Some of these identity terms can encompass diversity of gender, sex characteristics and sexuality in a holistic way that describes more than one aspect of a person's sense of self (for example takatāpui and queer). The rainbow population also includes people who do not use a specific identity label, people whose identity changes over time, and people who are in the process of understanding their own identity, and may not have ‘come out’ to themselves or others.” (Clunie 2016)

There is extensive international literature pointing to an increased risk of mental disorders, mental distress, substance use, and suicide and self-harm across rainbow communities (Plöderl and Tremblay 2015) (Adams, Dickinson, and Asiasiga 2012). There are also differences in patterns of risk between different communities. However in Aotearoa New Zealand at a population level we do not have good information about the mental health of the LGBTIQ+ community, except for among young people.

In the Youth '12 National Youth Health and Wellbeing Survey, 91.9% of participants identified as opposite-sex attracted, 3.8% as same/both sexes attracted, and 4.3% gave a “Not sure/Neither” response (Lucassen et al. 2014).

Young people who are same/both sexes attracted face more challenges from discrimination compared to their opposite sex attracted peers, and these additional challenges result in disparities between these groups on many measures of mental health. The Youth '12 Survey found that compared to opposite sex attracted youth, same sex/both attracted youth reported less positive

family interactions and support overall (for example, they felt less able to talk about problems and worries with parents); were more than three times as likely to have significant depressive symptoms (41% vs 11%); were more than twice as likely to have deliberately self-harmed in the past year (59% vs 23%); and reported extremely high levels of suicidality. Almost half (48%) of the same/both sex attracted students in the survey reported seriously thinking about attempting suicide, and just under 1 in 5 (18%) had attempted suicide during the previous 12 months. These proportions were much smaller for opposite-sex attracted students: 15% had seriously thought about attempting suicide and 4% reported that they had attempted suicide.

Recent results from a community sample of 1,799 adolescents in Aotearoa New Zealand (Fraser et al. 2017) indicate that while the prevalence of non-suicidal self-injury (NSSI) was 21% in the sample overall, the prevalence was markedly higher among participants who identified as transgender or same/both sex attracted (although the small numbers in these groups make the estimates imprecise). The increased risk was mediated by emotion regulation rather than sexuality concerns, suggesting that additional social stress experienced by these participants due to social exclusion and discrimination was an important driver. This is in keeping with other literature which suggests that it is the effects of “minority stress”, social exclusion and discrimination rather than sexual or gender identity itself which is an important factor in the mental wellbeing and high suicide rates among LGBTIQ+ communities (Kelleher 2009; Rosentreich 2013).

There is less evidence available for older age groups. Results from the Christchurch Health and Development Study (Fergusson et al. 2005) showed that at the age of 25 years, only 2% of participants described themselves as bisexual, gay or lesbian, suggesting that many participants chose not to disclose their sexual orientation. However, those participants who did report being predominantly same/both sex attracted were significantly more likely to have experienced depression, anxiety and suicidal thoughts, and to have attempted suicide.

Despite the high risk, there are few services specifically provided to support the mental health of rainbow communities in New Zealand. A 2012 needs assessment of mental health promotion and prevention services for gay, lesbian, bisexual, transgender and intersex in Aotearoa New Zealand conducted by Te Pou identified very few services specifically for these populations and no DHB funded or national mental health promotion initiatives (Adams, Dickinson, and Asiasiga 2012). Many of the services available are in the NGO sector and are provided by minimally funded or volunteer organisations.

New Zealand research has identified barriers to health care for individuals who identify as transgender (unless they have the resources to access private services) including increasing demand for a small number of specialists around Aotearoa New Zealand; providers of hormone therapy not

working in alignment with psychological services; low availability of psychological services; and non-funding of surgical therapy in the public sector (Delahunt et al. 2016). Other research has found that a quarter of people using mental health services in Auckland identify as rainbow, but often do not make themselves visible because of fear of discrimination from service providers (Birkenhead and Rands 2012).

What can be done?

As with other groups, important areas for action include combatting discrimination, both institutional and interpersonal, enabling full participation in society, supporting connectedness, provision of accessible and appropriate health services, and good data collection and research to track progress.

In their 2012 needs assessment Adams and colleagues (2012) identified six key areas for action:

- building GLBTI leadership capacity;
- addressing stigma and discrimination;
- enhancing young people's safety through teacher training and school initiatives;
- obligations on funders to provide for the needs of rainbow communities, both in mainstream services and through provision of specific services;
- research and information to better understand needs including through routine data collections;
- supporting practitioners through training and resources, to ensure that all those providing mental health services are able to provide competent services in a respectful way, and auditing services to ensure that policies and practices are improving.

Similar themes are picked up in 2016 in Australia's National LGBTI Mental Health and Suicide Prevention Strategy: A New Strategy for Inclusion and Action (Morris and Jacobs 2016). The strategy was developed to address the lack of attention to LGBTI populations in previous national mental health and suicide prevention strategies. It has six strategic goals:

- Inclusive and accessible services, including equitable access and support that is appropriate to experiences of LGBTI individuals;
- Evidence, data collection and research;
- Recognising the diversity of the LGBTI population;
- Intersectionality and social inclusion, including reduction of stigma and discrimination;
- Skilled and knowledgeable workforce who are confident and competent in responding to the support needs of the LGBTI population; and
- Promotion of mental health and prevention of suicide.

Specific actions to address structural discrimination include reform of the Human Rights Act to include prohibition of discrimination on the grounds of gender identity, gender expression and sex characteristics (to ensure explicit inclusion of transsexual and intersex people), and responding to the 2016 UNCROC recommendations to develop child rights based health care protocols for intersex young people.

In their 2012 review, Adams and colleagues identified key needs for LGBTI mental health promotion and protection from the literature, including "having a sense of belonging and connection; being supported with the coming out process; ensuring safe settings and environments; being able to access socially and culturally appropriate mental health services and support; and being able to interact with affirming and respectful mental health professionals who are educated about GLBTI communities".

Diversity in the LGBTIQ+ population includes ethnic and cultural diversity. The white-centric nature of much of the LGBTIQ+ community has been noted as Exclusion from the rainbow community on the grounds of ethnicity New Zealand research with takātapui, Māori who identify as LGBTIQ+, particularly takātapui tane (gay men), has found that both sexual and cultural identity are important, and that neither mainstream nor Māori specific services are meeting the needs of this group (Adams, 2012). However Māori cultural identity can also act as a positive resource for mental health.

As many of the specific services are provided by community-led NGO initiatives such as OUT-line and Rainbow youth, as well as less formal community supports, adequate resourcing of communities to develop and provide such initiatives is important (Adams, 2012). The success of the gay community led response to HIV/AIDS in New Zealand suggests that resourcing of such initiatives is likely to be an effective approach.

Mainstream services also need to be provided in a way that is accessible and safe for LGBTIQ+ communities, by health professionals who are well trained in LGBTIQ+ health and able to provide informed, inclusive and respectful care. A recent report on Rainbow Health from Auckland's Affinity Services identified the need for training and awareness of the physical and mental health needs of Rainbow Communities to become a mandatory part of all health qualifications and for there to be appropriate funding for a consistent and culturally sensitive standard of service delivery throughout the health sector (Stevens 2013).

Recommendations from Rainbow Health Report (Stevens 2013)

1. Rainbow community service users will receive equitable and culturally safe access to general and mental health services across their lifespan.
2. The particular health needs of tangata takatāpui will be considered and addressed in line with the state's obligations and commitments under the Treaty of Waitangi and the principles of partnership, protection and participation.
3. All health services will be supported and resourced to deliver culturally sensitive and appropriate services for Rainbow communities
4. Rainbow communities will be actively involved with and consulted about the development and delivery and evaluation of appropriate policies, programmes and services.
5. Research and data collection on the physical and mental health needs of Rainbow communities will be a priority for health research.

Collection of information on biological sex (beyond male and female), gender identity and sexual orientation, both in routine data sets and in research is important for developing a clearer picture of the mental health of rainbow communities. Statistics New Zealand have been undertaking a process of consultation and testing with the aim of including these topics in all social surveys and in the 2023 Census. Plans to include these topics in the 2018 Census were not realised. More information can be found at: <https://www.stats.govt.nz/reports/sex-gender-and-sexual-orientation>

4.4 People who share a common experience

This section examines the populations identified by the Inquiry who share a common experience which is part of the cause of their higher rates of mental distress, mental health conditions and substance use. Any distinction between identity and experience is of course a false one: shared experience may be a part of identity, and shared identity may also come with shared experience. Just as discrimination is an important factor in understanding and intervening to promote the mental health of groups with shared social identity, the stigma of imprisonment and the racism encountered by refugees also increase the vulnerability of these groups. However, here we discuss the ways in which focusing on common experience and its sequelae can provide ways of thinking about solutions.

There are two key ways in which experiences can lead to mental health and addiction challenges: trauma related to the experience, and social disconnection resulting from, or associated with that experience. These mechanisms are interrelated (social connections can lessen the effects of, and are important for recovery from trauma (Aldrich and Sawada 2015)) and can both be the subject of intervention and support to prevent and manage mental distress.

Trauma is increasingly recognised as a pervasive cause of mental distress. Appropriate and informed support to manage and recover from traumatic experience, including recovering from the trauma of displacement or of violence, is therefore needed. Trauma-informed care responses are key to health care for people who have undergone and are undergoing traumatic experiences such as resettlement or imprisonment. Specific health services to respond to post traumatic stress may be needed, but also social supports.

Previous trauma can also act as a barrier to help seeking, and high need will not always result in accessing support. Traumatic experiences, including those at the hands of those in positions of authority, can result in a lack of trust in services and professionals. Mental health services (particularly seclusion and restraint practices) can also be re-traumatising (Sweeney et al. 2016).

Shared experiences can also result in the breaking of social connections which are key to wellbeing. Minimising and mitigating the disconnection resulting from experiences such as imprisonment or moving to a remote area is important for addressing the mental distress of these groups. For example, disconnection from family can occur as a result of imprisonment or resettlement. Policy responses can minimise this disconnection, for example family reunification policies, policies to keep prisoners close to family, and mother and child units in prisons. Mitigation responses could include providing technology to enable people in the armed forces to remain connected to family supports,

or providing opportunities for real or virtual social connection in rural communities, as well as support to remake and keep connections in the face of ongoing disconnection such as resettlement.

Connection to others with similar experiences can also be a positive resource for wellbeing. Opportunities to connect with others who have lived through similar experiences are important in offering peer support and hope. For example peer workers are pivotal in support for people who inject drugs. A recent Aotearoa New Zealand study showed that access to peer-based needle exchange services was associated with improved mental health outcomes compared to other types of needle exchange (Hay et al. 2017). Peer workers in prisons have also been shown to have positive effects on health (including mental health) for both the peer workers and those for whom they provide support (Bagnall et al. 2015).

This section briefly reviews some key issues pertaining to particular groups with shared experience. For the sake of brevity it is not an exhaustive review of the issues faced by any of these groups, nor of possible responses. Two extra groups are included beyond those specified by the Inquiry panel: the families of people who are experiencing mental health or addiction challenges or have died by suicide, and people experiencing extreme social exclusion, including people who are homeless, and people who inject drugs. These two groups are important because of their increased vulnerability to mental health and addiction challenges and their need for particular support.

This section focuses on the particular support and health care needs of people who share traumatic and/or disconnecting experiences with consequences for wellbeing. However, it is important that this does not take attention away from addressing the causes of traumatic experiences themselves, such as violence. In particular, prevention of family violence and prevention of imprisonment are two key ways of reducing the burden of mental health challenges among the affected groups.

For each group two questions considered below we summarise what is known about mental health, distress and addiction among this group, and some of the important and effective ways to respond to the needs of this group?

4.4.1 Refugees and refugee-like migrant populations

What do we know?

Unlike voluntary migrants, refugees do not leave their home country by choice, and are unlikely to have the option to return. The United Nations defines refugees as people who:

“...owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of [their] nationality and is unable, or owing to such fear, is unwilling to avail [themselves] of the protection of that country; or who, not having a nationality and being outside the country of [their] former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it. “

Internationally there is an extensive body of literature pointing to the high risk of mental health and addiction challenges in displaced persons, particularly post-traumatic stress disorder and depression (Nickerson et al. 2017). The dual problems of trauma prior to resettlement, and trauma from the resettlement process itself, have been identified as major contributors to subsequent mental health and substance use challenges (Silove, Ventevogel, and Rees 2017). However it is important to note that although the risk is increased, the majority of people who have been displaced do not experience PTSD (Betts, Bloom, and Weaver 2017). It is also important to recognise the resilience and resourcefulness of those who have been displaced and forced to resettle in a new place. Support to enable ‘bottom up innovation’ by refugee communities can have significant wellbeing benefits (Betts 2017).

The huge influx of refugees into the EU is bringing the treatment of PTSD and trauma to the fore, and some countries (for example Sweden) are developing considerable expertise in this area.

Each year Aotearoa New Zealand accepts refugees through the United Nations High Commission for Refugees (UNHCR), prioritising those with high health and social needs. The number of “quota” refugees has recently increased to 1,000 per year and is set to rise further to 1,500 annually. Those people who come into Aotearoa New Zealand under this quota system spend six weeks at the Mangere Resettlement Centre and are provided with a range of settlement supports including mental health assessment and support from Refugees as Survivors New Zealand (RAS) (Te Pou o te Whakaaro Nui 2010). A number of NGOs also provide specific supports for quota refugees after they leave Mangere.

Information is collected on a number of health and social outcomes for quota refugees as part of reporting on the New Zealand Refugee Resettlement Strategy, including the proportion of people who access mental health services in the twelve months after arrival, as well as other health,

employment, housing, education and language outcomes. In 2014/15 43% of quota refugees had accessed mental health services in the 12 months after arrival, 89% of whom were seen within one month of arrival in New Zealand (i.e. while still in the resettlement centre) (From: <https://www.immigration.govt.nz/documents/refugees/2015-nzrrs-dashboard.pdf>)

Other refugee-like migrants, including asylum seekers and the family members of people who have already come to Aotearoa New Zealand as refugees, also settle in Aotearoa New Zealand. However, these groups are not provided with the same level of resettlement support. For asylum seekers, there is no entitlement to health care or education services, and there can be long periods of uncertainty, both of which are detrimental to mental health.

What can be done?

The WHO Health Evidence Network recently produced a review of evidence on mental health care for refugees, asylum seekers and irregular migrants (Priebe, Giacco, and El-Nagib 2017). This extensive review concluded that “Good practice for mental health care includes promoting social integration, developing outreach services, coordinating health care, providing information on entitlements and available services, and training professionals to work with these groups. These actions require resources and organizational flexibility.” Poor socioeconomic conditions were associated with poorer mental health after resettlement, and so support needs to address living conditions and financial security as well as responding to mental health needs.

Barriers to accessing mental health care among refugee populations identified include:

- lack of knowledge about entitlements and the health care system (by both the migrants and the health professionals treating them);
- language barriers and access to quality interpreting services;
- cultural beliefs about mental health which influence whether and in what way people seek help; and
- lack of trust towards services and authorities due to pre-settlement experiences and post-settlement experiences where legal status is problematic. This can affect the relationship with clinicians and also interpreters (Priebe, Giacco, and El-Nagib 2017).

A 2017 briefing from the International Society for Traumatic Stress Studies (Nickerson et al. 2017) made the following recommendations:

1. Evidence-based interventions should be made available for, and implemented where possible with, refugees with psychological disorders.

2. Settlement policy and mental health and psychosocial support (MHPSS) programming should facilitate positive mental health outcomes amongst refugees via the provision of resources, enhancing the capacity of the individual for resilience, and strengthening family and community supports. Settlement policy should consider the potentially negative effects of restrictive immigration policies on mental health.
3. Clinicians and support workers should take into account contextual factors (i.e., cultural background, daily stressors, living, family and school environments) when working with refugees and asylum-seekers.
4. High-quality research should be undertaken in collaboration with refugee communities to increase understanding and treatment of psychological disorders amongst refugees and asylum-seekers. More research should be conducted in LMICs to enhance knowledge about the mental health needs of those in sustained displacement.
5. Professional organizations can play an important role in facilitating, promoting and disseminating research on refugee mental health.

In Aotearoa New Zealand recent research has demonstrated that family reunification is a key factor in the mental wellbeing of people who come to Aotearoa New Zealand as refugees, and the absence of family is the greatest barrier to successful resettlement (Choummanivong, Poole, and Cooper 2014). Differing understandings of the concept of 'family' and who it includes between people coming to Aotearoa New Zealand as refugees and the Immigration New Zealand definition was also highlighted as a problem in this research. Clear, fair and timely processes for family reunification are needed to reduce the uncertainty and stress associated with the process (Human Rights Commission 2017).

Interviews and focus groups with refugee youth who were using Aotearoa New Zealand mental health services, their families, and mental health and community professionals resulted in the identification of four categories of challenges (Te Pou o Te Whakaaro Nui 2008). Firstly, refugee youth were often traumatised by events pre-immigration, and when trying to settle in Aotearoa New Zealand, experienced discrimination, lifestyle changes, homesickness whilst undergoing adolescent development, all factors that were affecting confidence and dignity. Secondly, refugee youth were often part of complex family situations. Thirdly, accessing mental health services was difficult due to transport, waiting lists and limited opening hours of mental health services. Lastly, mental health services struggled at times with getting interpreters and liaising with other agencies.

Access to interpreters and culturally-safe services are key to providing effective care and support. Lack of access to professional interpreters when needed has been identified as a barrier to providing health care, particularly mental health care, for people from refugee backgrounds in Aotearoa New Zealand (Shrestha-Ranjit et al. 2017). Funded interpreting services available 24 hours per day, 7 days per week are needed for use by mental health professionals and relevant NGO services, with consistency of processes across Aotearoa New Zealand (personal communication Dr Jonahan Kennedy, Newtown Union Health Service, 2018).

A recent report on responding to the needs of asylum seekers in New Zealand from the Human Rights Commission (Human Rights Commission 2017) recommended extending access to free mental health care, education, and housing to this group. This would be in keeping with international literature suggesting that the provision of resources to resettled populations is important for mental health.

The 2018 New Zealand Refugee Resettlement Strategy identifies government priorities to 2020 which include strategies likely to have a positive impact on mental health including a language assistance services project and improving employment outcomes and health service coordination (MBIE 2018). However the strategy remains focused on quota refugees.

The 2010 best practice guide for mental health and addiction services for refugees, asylum seekers and new migrants published by Te Pou provides guidance for health practitioners on the mental health challenges faced by refugees and other new migrants and on promising and best practice therapies (Te Pou o te Whakaaro Nui 2010).

4.4.2 Prisoners and others involved in the justice system

What do we know?

The number of people in prison in Aotearoa New Zealand has increased markedly over the past thirty years, with particularly rapid increases between 2002 and 2007 and since early 2015. In 2016 the prison population exceeded 10,000 for the first time, and it has continued to grow since then, now over 10,500. Most of the increase has been in the remand population. Men make up the vast majority of prisoners, but the number of women in prison has increased at a disproportionate rate: since 2015 the number of women in prison has increased by 40%. Māori are over-represented in New Zealand prisons, with an imprisonment rate of more than six times the European rate. More than half of remand and sentenced prisoners are Māori, and the over-representation of Māori is more pronounced among female prisoners—with 63% being Māori. New Zealand's prison population is now one of the highest in the OECD at around 220 per 100,000, and rising, compared to an OECD average of 147 per 100,000. (Gluckman 2018b)

A major cause of growth over the past 10 to 15 years has been prisoners on longer sentences (more than two years serving a greater proportion of their sentence in custody. The average proportion of a long-term sentence served in custody has increased from 52% in 2002/03 to 77% in 2016/17. This is an outcome of the Parole Act 2002, which removed provisions allowing for the automatic release of long serving prisoners at a point two-thirds of the way through their sentences, and replaced it with a system of discretionary release, based on risk, administered by the Parole board. There has also been a steady increase in the number of prisoners serving indeterminate sentences. (Gluckman 2018b).

Mental health and substance use disorders are internationally known to be substantially higher among prisoners than in the general population (Fazel 2016). This was demonstrated in the 1999 New Zealand Prisoner Mental Health Study (Simpson, Brinded, and Laidlaw 1999). However, the 2016 study of prisoners mental health (Indig, Gear, and Wilhelm 2016) showed a significant increase in psychiatric morbidity since the 1999 study.

The 2016 survey used the Composite International Diagnostic Interview 3.0 (CIDI 3.0) and the Personality Diagnostic Questionnaire 4+ (PDQ-4) to assess the prevalence of mental health and substance use disorders. The study sample included 1209 New Zealand prisoners across 13 prisons. The study found that nearly all (91%) prisoners had a lifetime diagnosis of a mental health or substance use disorder and 62% had this diagnosis in the past 12-months. Female prisoners were significantly more likely to have a 12-month diagnosis of any mental disorder than male prisoners (75% compared to 61%). Prisoners were three times more likely than the general population to have a 12-month diagnosis of any mental disorder (62% compared to 21%). Mood and anxiety disorders

were common, with nearly one quarter of prisoners having met the criteria for each of mood disorders (24%) and anxiety disorders (23%) in the past twelve months. A lifetime post-traumatic stress disorder diagnosis was four times higher among prisoners (24%) than in the general population (6%), while over half (52%) of women prisoners met the criteria for PTSD in their lifetime.

The vast majority of prisoners (87%) had a lifetime diagnosis of a substance use disorder (seven times the prevalence in the general population), and just under half (47%) had a 12-month diagnosis of a substance use disorder. Marijuana was the most prevalent drug of abuse with 24% of prisoners having a lifetime diagnosis, while stimulants were the most common drug of dependence with 23% having a lifetime diagnosis. Comorbidity was also common, with one in five (20%) prisoners having a 12-month diagnosis of a comorbid mental health and substance use disorder, while 42% were found to have a lifetime comorbidity diagnosis.

Prisoners were nearly five times more likely (28% compared to 6%) to have experienced psychological distress in the past 30 days compared to the general population from the 2013/14 New Zealand Health Survey. Prisoners also had higher rates of suicidal behaviours than people in the general population, including being twice as likely to have ever thought about suicide (35% compared to 16%) and four times as likely to have ever attempted suicide (19% compared to 5%). Female prisoners had higher rates of suicidal behaviours than men, including ever thinking about suicide (44% compared to 34%) and ever attempting suicide (29% compared to 18%).

Fewer than half (46%) of prisoners found to have a mental health or substance use disorder over the previous twelve months had received some form of mental health treatment in the past year. Female prisoners had significantly higher rates of mental health treatment than males for nearly all disorders, including 60% of women with a 12-month diagnosis of any mental disorder obtaining mental health treatment compared to 45% of men. Pacific peoples were substantially less likely to access health services for their mental health than prisoners of European descent (33% compared to 54%).

Those involved in the criminal-justice system have faced multiple risk factors and vulnerabilities, including experience of abuse and trauma, which contribute to an increased risk of mental disorder and substance use. Three quarters have been victims of violence, almost half (48%) of those in prison experienced family violence as a child, and 53% of women and 15% of men have experienced sexual abuse. (Gluckman 2018b)

Much less is known about the mental health of prisoners after release from prison in New Zealand, but international research suggests that the time after release is a high risk period, with an increased risk of suicide, particularly for those with mental health conditions, and an increased risk of

reoffending and re-incarceration among those with severe mental illness, making this an important period for intervention (Hopkin et al. 2018).

What can be done?

Addressing upstream factors to prevent imprisonment, including prevention of family violence, addressing family poverty and income inequalities, and reducing inequalities in educational achievement, needs to be part of a societal public health approach to improving prisoner health. The recently released report on reducing youth offending by the Prime Minister's Chief Science Advisor (Gluckman 2018a) identifies ten ways to intervene on entry pathways into prison including those aimed at parenting supports and maternal mental health, as well as supports and interventions to address early behavioural problems.

Addressing factors in the law which are leading to high imprisonment rates, particularly among those with mental health problems and addictions, is also important. There is growing movement internationally to treat substance use and addictions as health and social rather than criminal problems. For example the European Monitoring Centre for Drugs and Drug Addiction recently released a European Guide to Health and Social Responses to Drug Problems, which lays out the evidence for public health (as opposed to legal) responses to demand reduction (European Monitoring Centre for Drugs and Drug Addiction 2017) In New Zealand an alternative Model Drug Law, Whakawātea a Haurahi, has been proposed by the Drug Foundation, which aims to reduce the harms caused by drugs and by current drug laws, as well as promoting human rights and improving equity for Māori (New Zealand Drug Foundation 2017).

Addressing bias in the justice system, particularly ethnic bias, is another important factor. The 1988 report by Moana Jackson, He Whaipaanga Hou, was important in raising the issue of racial bias in the justice system (Jackson, 1988). This work is currently being revisited in a 2018 project which will add to the evidence in this area. The 2018 He Whaipaanga Hou will investigate:

- current Māori views of institutions in the criminal justice system in comparison with those in the original 1988 report
- the operations, policies and effectiveness of these criminal justice system institutions in regards to Māori
- comparisons of indigenous peoples of the four settler states (Australia, Canada, United States and New Zealand) and their respective criminal justice systems, with recommendations based on this research.

Preventing mental distress among people who are imprisoned will include approaches to minimising the trauma and social disconnection arising from imprisonment.

Policy approaches can minimise the disconnection of imprisonment, including disconnection from family and whānau. For example, mother and baby units in prisons have been shown to reduce recidivism, but there are also indications of wellbeing benefits for mothers and babies (Shlonsky et al. 2015). Connectedness to family, whānau and community are disrupted by imprisonment, and further disrupted when visits are infrequent (which is likely to occur when prisons are far from a person's local community), while frequent visits have benefits for reintegration and reduce reoffending (Mitchell et al. 2016). The justice reinvestment model, which aims to identify resources consumed by the justice system and consider how they can be better directed to benefit communities, where reintegration into the community is a central goal, is one approach to minimising disconnection from community (Workman and McIntosh 2013).

Meaningful connectedness while in prison is also important. For example, peer support in prisons has been shown to be beneficial to the wellbeing of both the person giving and person receiving support (Bagnall et al. 2015).

More humane approaches to imprisonment can minimise the trauma of imprisonment. An alternative approach which puts wellbeing at the heart of the criminal justice system is therapeutic justice, where the potential of the law to act as a therapeutic agent is recognised, and policy is shaped around therapeutic aims (Workman and McIntosh 2013). This approach has led to the development of specialist drug courts and mental health courts. Evidence from the US, Canada and Australia points to the effectiveness of drug courts in reducing crime and reconviction rates (Workman and McIntosh 2013). In New Zealand Alcohol and Drug Treatment courts have been piloted since 2012 and a nationwide rollout is now planned. Final evaluation reports are awaited but process evaluation indicates that these courts are reducing alcohol and drug related harm for participants (Smith et al. 2016).

Mental health and addictions services in prisons are run separately from the national health system, and administered by Corrections. Corrections provides primary care services to all prisoners, and mental health assessment and support. In response to the high levels of need found in the 2016 survey, Corrections are piloting new comprehensive and integrated mental health services across prisons and in four community sites, aiming to address moderate mental health needs of prisoners and support reintegration in the community. In addition, extra social work and counselling support for women prisoners is being provided. The acute and complex mental health needs of prisoners are met by forensic mental health services, which are also open to the general public, are in high demand and have not increased in capacity as the prison muster has increased. Where forensic services are not available, prisoners are managed in 'at risk' units, which are not equipped to respond to the underlying causes of self-harm and suicidal behaviour and instead are set up to manage risk,

meaning that people in prisons are not receiving the same level of care they would receive outside prison. A recent policy paper from Corrections has identified these issues, and suggested that New Zealand needs to be “open to the possibility of doing things differently” (Frame-Reid and Thurston 2016).

A literature review (The Werry Centre 2009) of the evidence for mental health and alcohol and other drug screening, assessment and treatment for youth justice populations, identified a number of best practice approaches including:

- screen (using an evidence based tool) and where necessary comprehensively assess young people in the youth justice system
- engage with the young person, understand the context, culturally sensitive response
- use service delivery models to ensure a comprehensive approach: e.g. Multisystemic therapy, Multidimensional treatment in Foster Care, Functional Family Therapy, Wraparound
- provide programmes to enhance parental competence e.g. Incredible Years (including in older children)
- provide integrated individual and family support services to facilitate transition back into the community
- develop a system of care based on social justice principles and the child’s right to care

The Canadian ‘Mental Health Strategy for Corrections in Canada’ (2012) provides an example of a national strategic approach to addressing the mental health needs of the prison population. It is based around four strategic priorities:

- Knowledge generation and sharing, including research and promotion of best practice
- Enhanced service delivery, including screening and assessment, treatment and support services, suicide and self-harm prevention, and transitional and community services to support individuals during and after their release from prison.
- Human resource management: the ongoing support, education and training in mental health for corrections staff.
- Building community supports and partnerships that support a continuum of care while contributing to public safety

4.4.3 Rural/farming population

What do we know?

There is very limited reporting of mental health and addictions, or mental health service use, by rurality in Aotearoa New Zealand, so there is not sufficient information available to describe the mental health or substance use patterns of this group. The lack of specific reporting about rural mental health has been identified by the Rural Health Alliance Aotearoa New Zealand (RHAANZ) as a failing, when anecdotal evidence points to increasing levels of distress, depression, and alcohol and other drug use, and problems with access to services (RHANZ 2016).

International evidence suggests that the prevalence of mental health conditions is similar in urban and rural settings, but that people in rural settings are less likely to access mental health care (Gamm, Stone, and Pittman 2010).

There is however information on suicide rates among rural populations. In a report on farm suicides for the rural health alliance RHAANZ (Beautrais 2017), it was noted that those at risk for farm suicide were not homogenous. Six distinct risk profiles were identified, with young farm labourers being at highest risk, and access to firearms and alcohol were common factors. An earlier review of found that an average of 25 suicides occur annually in rural New Zealand (Walker 2012).

What can be done?

The Rural Health Alliance Aotearoa New Zealand (RHAANZ) has developed a Framework to improve Mental Health and Addiction outcomes in rural Aotearoa New Zealand (RHANZ, 2016). The five key themes of the framework are **caring communities** looking after each other, **reachable services**, **accountability** for rural outcomes, a **circle of care** with well-resourced staff, and **understanding rural New Zealanders** by collecting good quality data. The framework has been developed by an expert advisory group, and a large number of activities identified and prioritised into two and five year actions to meet the outcomes for each theme. Priority actions include rurally relevant anti-stigma and drug and alcohol campaigns, an on-farm firearm safety programme, resourcing and availability of primary mental health services, and better links to specialist services. National rollout of Safe Hands, Safe Plans workshops providing mental health education for providers of rural primary care was another priority.

The need for a consistent definition of rurality for health reporting, for better use of available data, and for increased rural health research capacity were identified as important for improving our understanding of the mental health of rural New Zealanders, and working towards PHOs and DHBs reporting performance indicators based on geographical location (RHANZ, 2016).

In terms of suicide prevention in rural communities, the RHAANZ report on farm suicides made five recommendations for preventing farm suicides (Beautrais 2017): improving on-farm firearm safety, suicide prevention and depression education for service providers, targeted programmes for young labourers, safe rural alcohol socialisation practices, and continuing current suicide prevention programmes.

The major stress factors associated with rural life identified in a comprehensive 2004 review from the UK, highlight some of the important areas for potential action (Lobley, Johnson, and Reed 2004). The stress factors highlighted were:

- economic issues - particularly relating to changes in farming practice;
- isolation - again, particularly related to farming, but also a characteristic of mothers with young children, older people, younger people, unemployed and ethnic minorities;
- value and perceptions of self-worth - farmers perceive themselves to be misunderstood;
- age-related factors - problems relating to succession, inheritance and retirement in farming;
- demographic changes - changes in rural communities, fragmentation of kin networks, competition for housing with incomers;
- employment - mismatched employee profile between those leaving traditional rural industries and requirements of alternative industries, e.g. high tech sectors; and
- housing and services - difficulties in accessing both.

Examples of providing reachable services to rural communities are reported in *Care Closer to Home* (Ministry of Health 2014), particularly the use of telemedicine. The work of rural mental health nurses working in general practices to provide mental health advice and assessments is also highlighted. These nurses, working closely with doctors and practice nurses, support patients with anxiety, financial problems, and closely monitor medication treatment.

4.4.4 Veterans and people serving in the armed forces

What do we know?

There is no routinely collected information about the mental health of Aotearoa New Zealand veterans. A record linkage study of Aotearoa New Zealand veterans who served in Vietnam in the 1960s and 70s found increased rates of hospitalisation for alcohol-related mental disorders, but not for other mental health conditions. However, hospitalisation is a rare event and not a good proxy for the level of mental health and addiction challenges in this group (Cox et al. 2015). In contrast, an Australian interview study of Vietnam veterans found that 50% of the sample reported anxiety and related problems, and 15.6% substance use problems (O'Toole et al. 2009). There is some evidence that the mental health consequences of more recent conflicts have been lower, perhaps due to more rigorous health selection in armed forces recruitment and deployment decisions or the 'Healthy warrior effect' (i.e. psychological resilience is required to withstand challenges of training and therefore is a prerequisite for deployment). A survey of the health of contemporary Aotearoa New Zealand veterans is currently being conducted by researchers at the University of Otago.

New Zealand Veterans' Affairs (NZVA) provides a range of services including pensions, lump sum payments and assistance with paying medically-related costs such as travel. Medical treatment costs may also be covered, but this is discretionary, limited to 'service-related conditions' and only available when there is no other source of public or other funding (Cox et al. 2015).

What can be done?

We were not able to find any guidance or research relating to improving the mental health of veterans in New Zealand. However there are several international strategies which may provide a useful starting point. As with other groups affected by a common experience, specific supports to deal with that experience and maintain social connectedness may be needed.

Canadian Armed Forces (CAF) and Veterans Affairs Canada Joint Suicide Prevention Strategy (<https://www.canada.ca/en/department-national-defence/corporate/reports-publications/caf-vac-joint-suicide-prevention-strategy.html>). This strategy aims to promote wellbeing and prevent self-harm and suicide amongst Canadian veterans. It recommends that action be based around seven specific areas:

- Communicating, engaging and educating about mental health and suicide;
- Building and supporting resilient CAF members and veterans;
- Connecting and strengthening CAF members and veterans through families and community;
- Providing timely access to effective health care and support;

- Promoting wellbeing of CAF members through their transition to civilian life;
- Aligning protocols, policies, and processes to better manage risk and stress; and
- Continuously improve through research, analysis and incorporation of lessons learned and best practices.

Australia's Veteran Mental Health Strategy: A Ten Year Framework 2013-2023 is built around the principles of prevention (reducing onset and prevalence of mental health conditions); recovery (treatment, intervention and management, including the opportunity to live a meaningful and fulfilling life, even with symptoms); and optimisation (maximising individual mental health and quality of life) (Department of Veterans' Affairs 2013). It specifies six strategic objectives:

- Promote mental health and wellbeing through individual, community, policy and environmental factors;
- Strengthen workforce capacity by building a workforce with a strong understanding of the military and ex-military experience;
- Enable a recovery culture by reducing stigma and reluctance to seek treatment;
- Strengthen partnerships with mental health service providers, government departments and other organisations;
- Build the evidence base for best practice veteran mental health services;
- Ensure quality mental health care that is client-centred, evidence-based, efficient, equitable and timely.

Both strategies recognise the important roles played by families, with the scope of the Australian strategy including the mental health of veterans' families.

New Zealand is involved in the International Initiative for Mental Health Leadership's military mental health initiative which is across several countries. Items discussed in a pre-Exchange meeting in 2018 with nine countries included:

- Review ongoing military mental health research and initiatives related to the needs of Service members and their families
- Clinical efficacy and evaluating patient outcomes in treatment
- The Global Health Exchange, and
- Develop plans for collaboration between organizations. (Personal Communication J Peters 2018)

4.4.5 Families and whānau of people experiencing mental health and addiction problems and of people who have taken their own lives

What do we know?

The Inquiry terms of reference make reference to people with a family history of mental illness. We have refocused this population to examine what can be done to support the mental health of people who have a family or whānau member experiencing mental health and addiction problems.

There is considerable evidence that the families and whānau of people experiencing mental health and addiction problems are themselves at increased risk of mental health and addiction challenges.

The family carers of people with schizophrenia and other mental health conditions characterized by psychotic experiences are group who play a large part in supporting their family members. A Wellington based study interviewing these family carers found that they experienced more mental health problems than the general population, and identified unmet need for help for their own mental health challenges (Collings 2009). Higher social support among caregivers was associated with positive experiences of caregiving.

The families and whānau of people who have taken their own lives are at increased risk of mental health conditions, admission to a psychiatric hospital, and also of suicide (Pitman et al. 2014).

The children of people experiencing mental health and addiction challenges are a group who are particularly vulnerable, as demonstrated by the growing body of literature on the health effects of adverse childhood experiences.

What can be done?

Developing initiatives to improve outcomes for the children of parents with mental health and addiction challenges is a key action under the National Drug Policy 2015-2020, with a plan to identify and embed best practice elements into mental health services (Inter-Agency Committee on Drugs 2015).

An Aotearoa New Zealand example of a programme designed for the children of people with mental health and addiction challenges is **Te Puawai Aroha** (Blossoming Love), developed by the NGO Odyssey Auckland and funded by Counties Manukau DHB. Te Puawai Aroha is a holiday programme provided to about 150 children per year, with the aim of providing positive social experiences with each other and with staff for participating families. Children, parents and referring agencies have all reported high levels of satisfaction with the programme (Inter-Agency Committee on Drugs 2016).

Mental health and addiction services also have a role in recognising and addressing the needs of the children of adults who are using their services, including recognising the importance of the parental role of adults with mental health and addiction challenges. New Zealand research has indicated that children's needs are often not taken into account by mental health services (Pfeiffenberger et al. 2016).

Psychoeducational and support interventions appear to improve the experience of caring and quality of life and reduce distress for carers (although the quality of the evidence is mainly low), and should be considered as part of integrated services for people with severe mental health challenges (Yesufu-Udechuku et al. 2015).

There is currently limited evidence about the effectiveness of interventions to support those who have lost someone to suicide (suicide postvention), although there have been promising results from outreach to family and friends after suicide and group based programmes (Szumilas and Kutcher 2011). Any interventions should be evaluated to determine their effectiveness and add to our understanding of the important components of interventions.

In Aotearoa New Zealand Victim Support provides suicide postvention support nationally, with a network of Bereavement Service Specialists and volunteer support workers.

4.4.6 People who are most socially excluded

What do we know?

Persons who experience extreme exclusion (also known as ‘inclusion health populations’) are discussed under a separate heading because although these persons may belong to other population groups described in this chapter, they tend to experience problems that are qualitatively as well as quantitatively different from the experience of other members of these populations (Luchenski et al. 2017). They are not only disadvantaged relative to others but may be “off the scale of the social hierarchy completely” (Marmot 2017), requiring specialised approaches to inclusion and support.

Homelessness, imprisonment, drug addiction, sex work, and migrant or refugee status can originate from and also lead to extreme exclusion. Individuals with these experiences frequently come from communities where poverty is entrenched and persistent, with an increased risk of childhood trauma such as abuse or neglect, parent mental health and addiction challenges, or violence (Luchenski et al. 2017). There is a commonly described childhood history of material deprivation, difficult relationships, and low educational attainment among the extremely excluded (Bramley et al. 2015).

These complex pathways of exclusion lead to adverse outcomes in physical and mental health and substance use (“tri-morbidity”). Existing evidence demonstrates the high incidence of morbidity and mortality in these populations (Aldridge et al. 2017), but they are often difficult to identify in health statistics (Luchenski et al. 2017).

What can be done?

Individuals experiencing extreme exclusion tend to present with multiple, interlocking problems (Bramley et al. 2015) requiring intersectoral approaches to intervention (reviewed by Luchenski et al., 2018) as well as structural-level action to address the “causes of the causes” (Marmot 2017). It is also important to support the children people who are excluded have contact with or are estranged from (Bramley et al. 2015).

Internationally, inclusion health is a service, research, and policy agenda that aims to prevent and redress health and social inequalities amongst the most vulnerable and excluded populations (Luchenski et al., 2018). Under this agenda, a systematic review of health and social interventions that were found to directly affect health (pharmacology, counselling, screening and prevention) and the wider determinants of health (e.g. housing, social support, training, education, employment, crime and recidivism) for populations with experiences of homelessness, drug use, imprisonment and sex work was undertaken (Luchenski et al., 2018). Findings from the review included recommendations:

- Multiple evidence based individual level and structural interventions are available to prevent and address poor health outcomes in excluded groups but the need to translate and scale effective practice into action is crucial.
- Removal of barriers to access and uptake of services can be accelerated by involving people who have experience of social exclusion (peers).
- Extreme exclusion is associated with frequent use of acute services, providing a strong economic and social justice rational for preventative action.
- Homelessness is driven by a high prevalence of childhood trauma due to experiencing abuse, neglect, domestic violence, and parental mental ill-health and substance use disorders. These have a strong social gradient with the highest risk factors being found in families of the lowest incomes. Policy that reduces material poverty and deprivation, especially amongst families with young children have the greatest likelihood of preventing future trauma and subsequent homelessness.
- There are gaps in knowledge about upstream interventions that improve the determinants of social inclusion, such as employment and education, which are seen as instrumental in long term recovery from social exclusion.

Intensive approaches to enable connection and re-inclusion are required. One such approach is **Housing First**, a rights based model which was developed to meet the needs of homeless people living with mental health conditions and addictions, as an alternative to ‘treatment first’ approaches. The approach involves providing immediate permanent housing, without the need for housing readiness to be demonstrated and without housing being tied to other social supports or treatment, and has subsequently been extended to other homeless populations.

There is now considerable evidence that the Housing First Approach is effective in terms of providing ongoing stable housing and reducing homelessness, but also on other measures including reducing criminal justice system and emergency services contact, and improving quality of life (Woodhall-Melnik and Dunn 2016). The Housing First model is currently being implemented in Aotearoa New Zealand, and evaluations of its effectiveness in the New Zealand context, and for specific populations, are being carried out.

Other important interventions for the most excluded populations include **law reform** to decriminalise and therefore provide better support for marginalised populations. For example in New Zealand prostitution law reform has reduced stigma and increased access to support and protections for people engaged in prostitution. Drug law reform is another possible avenue.

Harm reduction approaches for addictions have also been successful in improving the health of people with addictions. For example in Aotearoa New Zealand the peer based needle exchange programme has been found to have a range of health and social benefits, including limiting the spread of HIV/AIDS, and improving the mental health of people who inject drugs (Hay et al. 2017)(Aitken 2002).

Campaigns to reduce the stigma of mental illness and addictions can improve help seeking and reduce marginalisation. In Aotearoa New Zealand the Like Minds Like Mine campaign was established in response to the Mason Inquiry and has been shown to be successful in improving attitudes to people experiencing mental distress (Cunningham, Peterson, and Collings 2016). Similarly, reducing the stigma of alcohol and other drug use is the focus of work currently underway by the Queensland Mental Health Commission (Queensland Mental Health Commission 2018).

Chapter 5 Taking action across services

Key points

Integration between mental health, addiction and physical health services, primary and secondary health services, and between the health sector and other public sectors is desirable. Many attempts have been made to achieve integration in Aotearoa New Zealand, but substantial areas of disconnection remain.

Stepped care is an example of an arrangement of mental health services to enable the right level of support for the particular level of need. However, again, it is difficult to operationalise.

E-mental health is an attractive method of service delivery because it is potentially less expensive than traditional support and treatment services, and because it allows people who would not normally do so to access services. There is now substantial evidence of effectiveness for some e-mental health interventions, however if they are not appropriate for the groups with the highest needs then there is a risk of further increasing inequalities in mental health and addictions if there is a reliance on these methods.

There is good evidence for the effectiveness of psychological therapies for the treatment of mild to moderate mental illness. Cost and workforce issues are the main barriers to the wide availability of these services.

The current Police/ Emergency Department model of crisis service is widely criticised. Alternative models are needed, and there are local models of success. More emphasis on providing lower levels of support earlier may be more effective and acceptable than focusing on crisis situations.

Alternative, peer led and co-designed services are key ways that Aotearoa New Zealand can be innovative in its mental health services. Working in partnership with mental health consumers is crucial to the development of effective alternative services.

Trauma informed care and support, summed up by a person being asked “what happened to you?” instead of “what is wrong with you?”, is slowly being implemented in Aotearoa New Zealand. A cross-government, coordinated approach is needed.

Coercion, either formal or informal, is common in mental health services, and this needs to change if Aotearoa New Zealand is to meet its international Human Rights obligations.

Zero suicides among those in contact with mental health services could become a feasible target for our mental health system. The Suicide Mortality Review Committee (2016) has identified possible ways that mental health services could reduce such deaths.

5.1 Introduction

This chapter focuses on mental health, addiction and social services, with an emphasis on integrated services, access to services, and support that is fit for purpose. The need for integrated services in both mental health services and the wider health system, as well as between sectors, has been discussed in Aotearoa New Zealand for at least 20 years, and yet still seems difficult to achieve. Access to services, specifically psychological therapies and crisis services, has been prominent in the debate surrounding the suitability of Aotearoa New Zealand's mental health services, as has the need for these services to be 'fit for purpose', i.e. the right services to meet the needs of those requiring them, available in the right place at the right time.

In this section, first we discuss approaches to integrated services – focusing both on the theory and the practice. We then look at access to services, specifically stepped care, e-mental health, psychological therapies and crisis services. Finally we look at support that is 'fit for purpose' – alternatives to mainstream services, including peer-led and co-designed services; trauma informed care and support; least coercive services; the zero suicides in mental health services campaign; and culturally safe services.

5.2 Integrated approaches to mental health and addictions

This section reviews the international and local literature on integrated approaches to mental health and addiction services, and identifies the themes most salient to the integration of mental health and addiction support. It also reviews what types of strategy can facilitate integrated services for people with mental health and addiction challenges, and identifies possible new and innovative approaches which exist internationally to promote cohesion within the health sector and across other sectors.

5.2.1 What do we mean by an integrated approach?

There is no universal definition or concept of integration, or an integrated approach in health care (Kodner and Spreeuwenberg 2002). A recent systematic review identified around 175 definitions related to integration in a health system context and a considerable degree of conceptual murkiness (Armitage et al. 2009). For example, the terms *integration*, *integrated care*, *integrated health care* and *integrated service delivery* are used interchangeably in the published literature and definitions can vary depending on the scale at which clinicians, policy makers and researchers are focusing on i.e. ranging from macro-level systems definitions to micro-level clinical conceptualisations.

Additionally, integration can be taken to mean integration at the system level or it can be taken to mean the coordination of services of programmes for a particular population (Armitage 2009). There are also a number of related terms which integration is used synonymously with including *managed care*, *continuity of care*, *coordination*, *patient centre care*, *shared care*, *case management* and

collaborative care. These terms are also used interchangeably and are open to varying interpretations.

Different perspectives

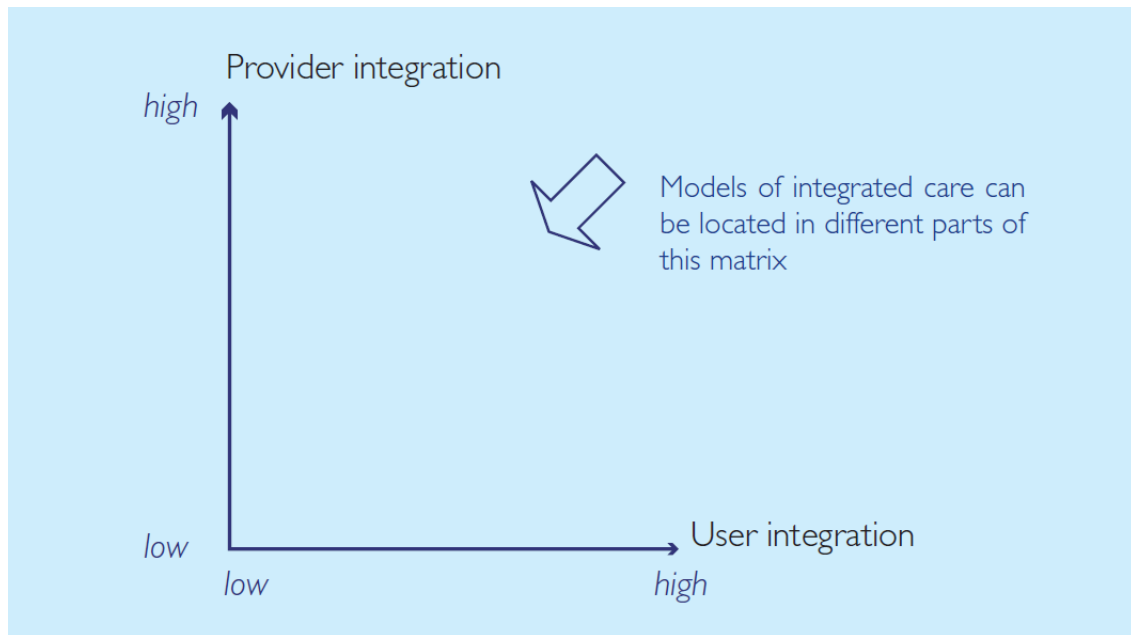
There are different ways of looking at integration, for example, hierarchical or ‘top-down’ views, driven by systems and organisation where the focus is on efficiency and processes, or a patient-centre and “bottom-up” view, in which the characteristics and needs of specific groups, and their “fit” with existing systems of care more or less determine the what, how and where of integration (Kodner, 2002). This latter humanistic or “patient-centric” view puts the needs of people experiencing mental health and addiction problems at the forefront (Kodner, 2002). To understand integrated care, therefore it is essential to understand that integrated care means different things to different stakeholders. For example:

- To the **user**, it means a process of care that is seamless, smooth and easy to navigate.
- To the **frontline provider**, it means working with professionals from different fields and coordinating tasks and services across traditional professional boundaries.
- To the **manager**, it means merging and coordinating organisational targets and performance measures, oversight of combined funding streams, managing and directing an enlarged and professionally diverse staff, management of complex organisational structures and inter-agency relationships, building and maintenance of shared culture.
- To the **policymaker**, it means merging budgets, regulations and financing arrangements, undertaking policy evaluations which recognise that interventions on one domain may have repercussions on those in other domains, and thus should be evaluated on a holistic basis as part of a broader care package.

(Adapted from (Lloyd and Wait 2006; Kodner 2009))

The most important distinction is between the user and the provider perspectives. For instance, in some models of care despite high levels of provider integration, users may experience low levels of integration in their access to services and care- or vice versa. This important distinction can be represented by the Integrated Care Matrix (see Figure 8.1).

Figure 5.1 The Integrated Care Matrix



(Source: Lloyd and Wait 2006).

Given models of integrated care can be located at different parts of the matrix, it is important therefore to consider these different notions and understandings of what is meant by integrated care when designing, evaluating or implementing integrated care policies in practice. The integrated mental health care agenda must find the appropriate balance between user and provider integration.

Integration for mental health: Triple integration

In the UK, the case has been made within the *NHS five year forward view* plan for what has been called 'triple integration': integration between primary and specialist care, between physical and mental health care, and between health and social care. The argument for triple integration comes from the fact that mental health care is often disconnected from the wider health and social system—institutionally, professionally, clinically and culturally. Many people do not receive co-ordinated support for their mental health, physical health and wider social needs because of artificial boundaries between services resulting in fragmented care that treats/addresses different aspects of health and wellbeing in isolation. Figure 5.2 is taken from a recent report released in the UK in relation to improving and integrating services in the NHS and demonstrates some of the groups of people who often suffer as a consequence of this fragmented care (Naylor, Taggart, and Charles 2017).

Figure 5.2 Potential beneficiaries of integrated approaches to mental health



(Naylor, Taggart, and Charles 2017)

The global push for an integrated approach to mental health care

The WHO's *Comprehensive Mental Health Action Plan 2013-2020* (World Health Organisation 2013) recognises the essential role of mental health in achieving health for all people. It relies on six cross-cutting principals which are particularly useful in thinking about what an integrated approach to promoting mental well-being, preventing suicide, preventing mental health and addiction challenges, and responding to the needs of people experiencing mental health and addiction challenges, or affected by suicide might look like in the local Aotearoa New Zealand context. These six principles are:

1. **Universal health coverage:** Regardless of age, sex, socioeconomic status, race, ethnicity or sexual orientation, and following the principle of equity, persons with mental disorders should be able to access, without the risk of impoverishing themselves, essential health and social services that enable them to achieve recovery and the highest attainable standard of health.

2. **Human rights:** Mental health strategies, actions and interventions for treatment, prevention and promotion must be compliant with the Convention on the Rights of Persons with Disabilities and other international and regional human rights instruments.
3. **Evidence-based practice:** Mental health strategies and interventions for treatment, prevention and promotion need to be based on scientific evidence and/or best practice, taking cultural considerations into account.
4. **Life course approach:** Policies, plans and services for mental health need to take account of health and social needs at all stages of the life course, including infancy, childhood, adolescence, adulthood and older age.
5. **Multisectoral approach:** A comprehensive and coordinated response for mental health requires partnership with multiple public sectors such as health, education, employment, judicial, housing, social and other relevant sectors as well as the private sector, as appropriate to the country situation.
6. **Empowerment of persons with mental disorders and psychosocial disabilities:** Persons with mental disorders and psychosocial disabilities should be empowered and involved in mental health advocacy, policy, planning, legislation, service provision, monitoring, research and evaluation.

(Source: WHO 2013).

An integrated approach in this report

The focus of this report is on ways of improving integration within the health system and between the health system and other systems such as education, social, housing justice, disability support, accident compensation, and emergency response. Collins et al argue that an integrated approach to preventing mental health and addiction problems, and responding to the needs of people experiencing mental health and addiction problems should occur through *health system-wide approaches* and *intersectoral collaboration* (Collins et al. 2013). That is, while integration lies at the heart of system wide approaches to health care (as suggested by triple integration), this integration also has to occur in sectors beyond health through collaborative partnerships of government, non-governmental organisations (NGOs) and faith-based organisations. It is this wider vision of integration that we adopt in this report.

5.2.2 Integration of primary and mental health services

Mental health care provided within general primary health services is the first level of care within the formal health system, and generally the first point of contact an individual has with the health system. Comprehensive primary health care is essential to making mental health care universally accessible to individuals and families in the community in an acceptable and affordable way. Primary Health Care was formally adopted by the WHO through the Alma-Ata declaration as the best method for providing a comprehensive, universal, equitable and affordable healthcare service. Primary mental health care provided within comprehensive primary health care has the ability to reduce stigma, improve access to care, reduce chronicity of mental illness and improve social integration (WHO and WONCA 2008). Essential services at this level include early identification and treatment of mental disorders, management of individuals with ongoing mental illness, counselling for common mental health disorders, referral to other levels where required, and mental health promotion and prevention activities (WHO and WONCA 2008; World Health Organisation 2009).

In 2008, the WHO and the World Organisation of Family Doctors (WONCA) in their report *Integrating mental health into primary care: A global perspective* (WHO and WONCA 2008) outlined the justification for providing integrated mental health services in primary care:

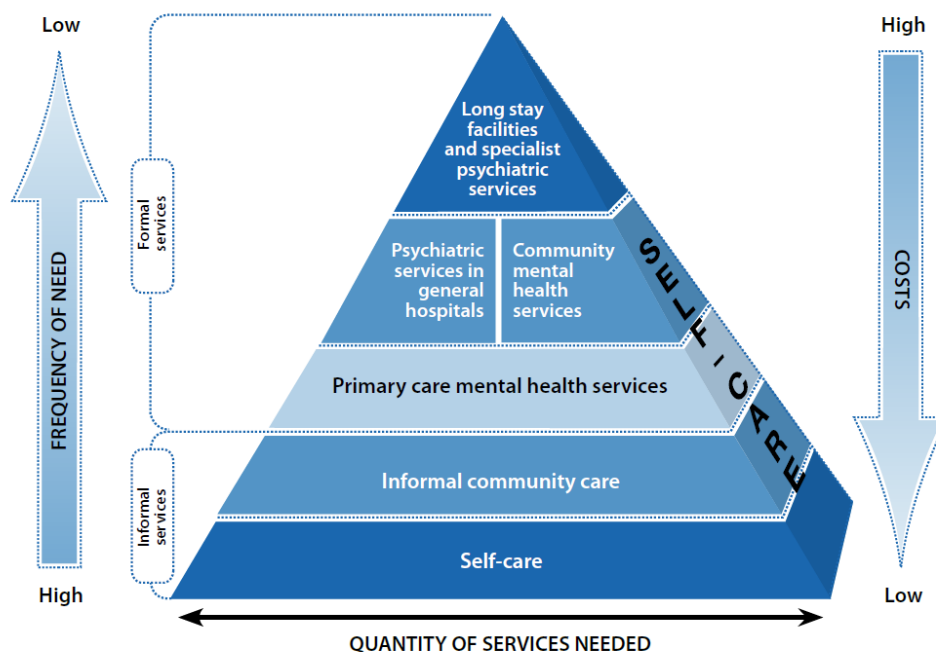
1. **The burden of mental disorders is great** and they create substantial personal burden for affected individuals and their families, and produce significant economic and social hardships that affect society as a whole.
2. **Mental and physical health problems are interwoven.** Integrated primary care services help ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.
3. **The treatment gap for mental disorders is enormous.** In all countries, there is a significant gap between the prevalence of mental disorders, on the one hand, and the number of people receiving treatment and care, on the other hand. Primary care for mental health helps close this gap.
4. **Primary care for mental health enhances access.** Integrating mental health into primary health care is the best way of ensuring that people get the mental health care they need.
5. **Primary care for mental health promotes respect of human rights.** Mental health services delivered in primary health care minimize stigma and discrimination, because primary health care services are not associated with any specific health conditions. Primary mental health

care can also enable early intervention and help prevent compulsory treatment in psychiatric hospitals.

6. **Primary care for mental health is affordable and cost effective.** Primary mental health care services are less expensive than psychiatric hospitals, for patients, communities and governments alike.
7. **Primary care for mental health generates good health outcomes.** The majority of people with mental disorders treated in primary health care have good outcomes particularly when linked to a network of services at secondary level and in the community.

There is no single model of mental health care integration that can be universally applied to services, rather, there are different models for effective collaboration that will comprise tailor-made combinations of structures, processes and techniques to address the needs of those accessing primary care (Kodner 2009). The World Health Organisation model of optimal mental health care (see Figure 5.3) provides an overarching model where integrated primary mental health care is a fundamental component and is supported by other levels of care including community and tertiary hospital services (World Health Organisation 2009).

Figure 5.3 The WHO model of optimal mental health care



Providing treatment at the primary health care level, backed by secondary health care and informal community care can prevent people from being admitted into psychiatric hospitals. Lack of integration or coordination between primary care and secondary mental health services is identified

as a problem in the Mental Health Commissioners 2018 report (Office of the Health and Disability Commissioner 2018). Recent research from the UK on new models of care introduced by the NHS Five Year Forward View discusses models which have the potential to integrate primary and specialist mental health care: (Naylor, Taggart, and Charles 2017)

- Multispecialty community providers (MCPs) – which combine GP services with other health and social care providers including mental health professionals
- Primary and Acute Care Systems (PACS) – where a single entity is responsible for delivering a full range of primary, community, mental health and hospital services

However the authors note that mental health needs to be explicitly included from the planning stages to be adequately integrated into these care models.

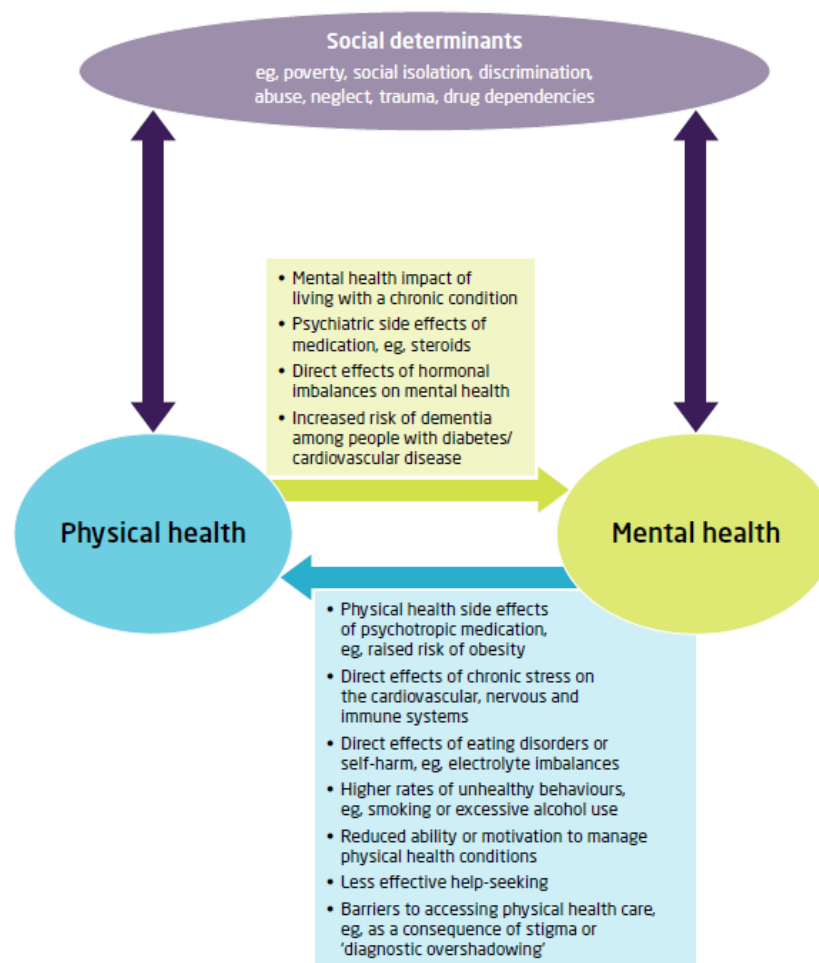
Primary mental health services are discussed further in the next part of this chapter (section 5.3).

5.2.3 Integration of physical and mental health care

Recent research from the UK argues that integrated care initiatives both in the UK and elsewhere have paid insufficient attention to the relationships between physical and mental health and that developing integrated approaches towards mental and physical health is increasingly becoming a policy priority (Naylor, Das, et al. 2016; Naylor et al. 2012).

Figure 5.3 demonstrates the bi-directional and complex relationship between physical and mental health.

Figure 5.3 Pathways through which physical and mental health are interconnected



Source: (Naylor 2017)

The compelling need or rationale for a more integrated approach to physical and mental health is supported by evidence for the following:

Poorer patient outcomes

- People with severe mental illness have a lower life expectancy and poorer physical health outcomes than the general population. In Aotearoa New Zealand both men and women using mental health services have more than twice the premature mortality rate compared to the rest of the population, with those diagnosed with a psychotic disorder having more than three times the mortality rate (Cunningham et al. 2015). Importantly, this difference is at least in part due to unequal access to physical health care – compared to the general population, people with severe mental illnesses are less likely to have their physical health needs identified or to receive appropriate treatment for these (Lawrence and Kisely 2010).

- People with long-term physical health conditions e.g. diabetes, arthritis, asthma, cardiovascular disease and some cancers – the most frequent users of health care services – commonly experience mental health problems such as depression and anxiety, or dementia in the case of older people (Naylor et al., 2012).

System pressures

- There is a lack of clarity over whether responsibility for providing primary health care to this group of people lies principally with primary care, mental health teams or both; leading to inequalities in health care provision for people with severe mental illness (Lawrence and Kisely 2010).

Financial costs

- There is evidence that the excess costs on the health system of long-term physical health conditions and mental health problems are substantial (Naylor et al., 2012).

In 2016, the Kings Fund UK published a report calling for physical and mental health care to be more integrated. The report states that “integrated care initiatives in England and elsewhere have paid insufficient attention to the relationship between physical and mental health” (Naylor, Das, et al. 2016) p4. It highlights ten priority areas of focus for integrating physical and mental health care. These are:

- 1) Incorporating mental health into public health programmes
- 2) Promoting health among people with severe mental illness
- 3) Improving management of medically unexplained symptoms in primary care
- 4) Strengthening primary care for the physical health needs of people with severe mental illnesses
- 5) Supporting the mental health of people with long-term conditions
- 6) Supporting the mental health and wellbeing of carers
- 7) Supporting mental health in acute hospitals
- 8) Addressing physical health in mental health inpatient facilities
- 9) Providing integrated support for perinatal mental health
- 10) Supporting the mental health needs of people in residential homes

An Aotearoa New Zealand example of integration in practice, linking mental health and physical health is the Equally Well programme. This is a collaboration of individuals and organisations aiming to reduce physical health disparities between people with experience of mental illness or addictions and those without. “Equally Well is about taking initiative and working together for change. Equally Well supporters span the health, mental health and social sectors, and include community organisations, mental health and addiction NGOs, primary care, district health boards, medical colleges and education providers.” [<https://www.tepou.co.nz/initiatives/equally-well-physical-health/37>]

Equally Well has been successful in bringing together service providers and people with lived experience to share ideas and experiences and develop solutions. For example the Equally Well prescribing toolkit has been developed to assist in conversations about medication, including the implications of the medication for physical and mental health and what could be involved in discontinuing (<https://www.tepou.co.nz/initiatives/equally-well-prescribing-toolkit/224>). Equally Well has also been successful at raising the profile of the health inequalities experienced by people with experience of mental illness at a national policy level, for example leading to the inclusion of people with severe mental illness as a high risk group in the latest Cardiovascular Disease Risk Assessment Consensus Statement (Ministry of Health 2018).

Equally Well is now about to launch in Australia and the UK.

<https://www.centreformentalhealth.org.uk/equally-well>

5.2.4 Integration of mental health and addiction services

Comorbidity or co-occurrence of mental health and substance use disorders is common, and can complicate management and add significant complexity in terms of care provision. A recent systematic review found that substance use disorders are strongly associated with mood and anxiety disorders: people with illicit drug use disorders were nearly four times as likely to have a mood disorder and nearly three times as likely to have an anxiety disorder compared to the general population, while those with alcohol use disorders were more than twice as likely to have anxiety or mood disorders (Lai et al. 2015). In New Zealand Te Rau Hinengaro found that among those with 12 month substance use disorders, 40% also had an anxiety disorder and 29% also had a mood disorder (Oakley Browne, Wells, and Scott 2006).

However mental health and addiction services have historically been provided separately. The Te Pou mental health workforce survey 2014 found that only 6% of the total workforce across mental health

and addictions was employed to provide combined mental health and addictions services (Te Pou o te Whakaaro Nui 2015).

Integrated provision of mental health and addictions treatments been found to be an effective and cost effective approach (Substance Abuse and Mental Health Services Administration 2009). The US based SAMHSA identifies the following critical components of integrated treatment for substance use and mental health conditions:

- Staged interventions, going through the stages of engagement, persuasion, active treatment and relapse prevention
- Assertive outreach, including help with social needs (e.g. need for housing among homeless people)
- Motivational interventions
- Counselling
- Social support interventions
- Long term perspective
- Comprehensiveness
- Cultural competence

(Substance Abuse and Mental Health Services Administration 2009)

5.2.5 Integration of health with the non-health sector

Integration can mean working across sectors, often referred to as intersectoral collaboration.

Adequate attention to mental health and addiction requires that integration occurs not only health system-wide but also in sectors beyond health e.g. education, justice, welfare, social care, housing and employment, through collaborative partnerships of government, non-governmental organisations (NGOs) and faith-based organisations (Collins et al. 2013).

There are two key issues for intersectoral collaboration:

1. Identifying the most appropriate sector(s) to deal with a particular health issue (in this case mental health and addiction) and establishing linkages between them.
2. Ensuring there are institutional mechanisms to enable cross-sectoral funding.

Integration between sectors can occur at the **service level around an individual**, to meet the health and social needs of people with complex needs. A recent review from Superu on integrated social services for vulnerable people (Superu 2015) found that there is emerging evidence that integrated social service models are effective for vulnerable individuals, families and whānau with multiple needs, but that implementation factors play a critical role in success (including sufficient funding and time, leadership, good communication and flexibility).

Models of integration between services include intensive case management to coordinate services, co-location of services (e.g. Youth One Stop Shops), wraparound services providing comprehensive services to meet complex needs (e.g. the Intensive Wraparound model of care for young people), and individualised funding (e.g. new model/system transformation of disability support services) (Superu 2015).

Integration between services is integral for a whānau centred approach such as Whānau Ora.

Principles underpinning whānau-centred delivery:

- incorporate a Māori kaupapa (values and beliefs)
- foster connectedness for whānau to engage with their communities and their people
- measure service delivery interventions in terms of the capacity for whānau to determine their own wellbeing
- establish a unified, coherent service delivery based on whānau needs
- acknowledge whānau integrity, accountability, innovation and dignity for wellbeing
- recognise the need for competent and innovative service provision to achieve whānau empowerment and positive outcomes
- allocate resources to attain best results, including indicators to measure outcomes of effective resourcing

(Superu 2015).

Individual Placement Services (IPS), a systematic approach to helping people with long term experience of mental health conditions achieve competitive employment, is an example of intersectoral integrated service provision to support someone with complex needs to achieve their goals. IPS has a strong evidence base (Bond, Drake, and Becker 2012) and is being implemented internationally including in Aotearoa New Zealand.

Co-responding Police-Mental Health Programs, where mental health and police jointly respond to a callout to someone in distress, are another example of an evidence based integrated approach to better meet complex needs (Shapiro et al. 2015).

Integration between sectors can also occur at the **policy level**, whereby sectors work towards agreed joint goals, and incorporate these goals in their policies and planning. This approach is also known as intersectoral action or health in all policies and is discussed further in Chapter 6 of this report.

5.2.6 Current examples of integration planning in mental health care and addiction in Aotearoa New Zealand

Planning for better integration of services has been the basis of many mental health projects and plans in Aotearoa New Zealand in the last few years. Examples of these plans are discussed below. These plans are mostly aspirational, though some list ways integration may be implemented, within a specific timeframe.

Examples of Aotearoa New Zealand documents aiming to implement mental health service integration:

- Integration in primary mental health and addiction service – Platform Trust, 2012. This report outlines six key directions that will enable progress towards more integration between NGOs and primary care. These directions are: “1) change our language and concepts of need; 2) address the barriers to collaboration; 3) focus on navigation and coordination; 4) explore community service options; 5) explore brief intervention options; and 6) focus on workforce development” (Platform Trust 2012) p1
- Waitemata DHB Primary and Community Services Plan 2016. Helping mental health patients get better and quicker help is one of the aims of the Waitemata Primary and Community Services Plan. The plan was believed to be the largest collaboration of its nature in the country, jointly produced by Waitemata District Health Board and primary health organisations Waitemata PHO and ProCare Health. The DHB both funds health services and provides hospital-based services, while the PHOs provide care through general practices. Primary Mental Health gets a boost with the *Our Health in Mind* initiative which sees \$1.4 million invested per annum to help more people get better sooner through earlier and improved access to local mental health and addiction support, assessment and treatment. (Waitemata District Health Board 2016a) (Waitemata District Health Board 2016b)
- The Mental Health and Addictions Workforce Review 2011. This recommends a shift towards primary and integrated care and preventive interventions at both ends of the life-cycle. (Mental Health and Addiction Service Workforce Review Working Group 2011)

5.2.7 What strategies and models can facilitate integrated care for people with mental health and addiction problems?

Integrated care has become a core component of health and social care reform across a number of countries. While there is increasing evidence that integrated care can improve access to mental health care, clinical outcomes and cost-effectiveness of care (WHO and WONCA 2008), its implementation in real-world settings is highly variable, may not conform to evidence based

practices, and is rarely evaluated (Sunderji et al. 2017). There has been considerable experimentation with models of integrated care across Europe (WHO and WONCA 2008). Many applications of integrated care have been exploratory and are local initiatives that are not necessarily replicated at a national level. Innovation remains a core characteristic of integrated care and as such no set typology of models of integrated care exists (Lloyd and Wait 2006). A recent “review of reviews” on health service integration commissioned by Queensland Health, Queensland Australia to inform efforts to integrate their mental health service concluded that “there is no ‘one size fits all’ approach to health service integration (Heyeres et al. 2016). Instead, this systematic review of 17 peer-reviewed systematic reviews from the UK (8 reviews), the USA (3 reviews) and Australia (3 reviews) highlights the complexity and variability of service integration, which in most studies involved a range of strategies. Nevertheless, it is possible to identify some of the key approaches or strategies that have been taken in attempts to implement integrated mental health care.

Strategies and models of integration

We use Kodner and Spreeuwberg’s (2002) continuum of strategies - from the macro to the micro - to identify the five different levels at which strategies or models to enhance integration can work at:

1. Funding: flow of funds for health and social care and related services can affect all aspects of integrated care.
2. Administrative: the way in which government regulations and administrative functions are structured and devolved can affect integration. In particular they can help eliminate programme complexities, streamline eligibility and access and better manage system resources.
3. Organisational: how organisations work together - collaboration, inter-agency relationships, co-location can facilitate seamless care.
4. Service delivery: Staff training, information sharing, relationship with patients and family carers, case-management, referral, professional networks. Can affect service access, availability, flexibility, continuity and coordination of care, consumer satisfaction, and quality and cost outcomes.
5. Clinical: shared professional language, best practices or agreed-upon practices, shared protocols patient-provider communication.

Appendix B presents a table illustrating strategies and models by level of integration. This provides examples of how the application of integration to services can be achieved, using Kodner and Spreeuberg’s framework.

5.3 Access to health services

Access to the right level of support in a timely way is another key area for services to get right, and one which has been identified as problem in Aotearoa New Zealand at present. The People's Mental Health Report highlighted the problems of long waiting times and needing to be in crisis to get access to services (Elliot 2017).

This section describes stepped care as a model for providing the least intrusive intervention required to meet mental health and addictions needs, and thus increasing access to support and care. Three aspects of accessible care are explored in more detail: e-mental health interventions, psychological therapies in primary care, and crisis care.

5.3.1 Stepped care

A stepped care approach ensures “the right level of support and therapy is offered to a person at the right time” (Te Pou o Te Whakaaro Nui 2015), in the least intrusive way and as long as the person requires it (Office of the Health and Disability Commissioner 2018). Stepped care has been proposed as an alternative to the usual method of ‘matched care’ (therapy choice matched to patient characteristics and preferences), where it has been argued that some patients receive too much treatment whilst others receive too little (Straten et al. 2015). In a stepped care approach, people typically start on low-intensity evidence-based treatment and then step up to subsequent treatment of higher intensity if they do not respond adequately. Stepped care has been recommended as an approach to increase access to and efficiency of mental health care for common mental conditions, because many people are likely to respond to the low intensity treatment and therefore not need more intensive (and expensive) treatment (Straten et al. 2015).

As part of the stepped care method, services help people to manage their own health and wellbeing, intervening early to help avoid the need for more intensive service (Platform Trust and Te Pou o Te Whakaaro Nui 2015). The less intensive intervention judged to be most likely effective is delivered first. At all levels of stepped care, people are supported by input from family and whānau, community services and appropriate cultural supports (Te Pou o Te Whakaaro Nui 2015). Stepped care models, where traditional primary care service are expanded to include mental health and addiction NGO services, primarily focus on the needs of the population and not on services (Platform Trust and Te Pou o Te Whakaaro Nui 2015).

The stepped care model presented by Te Pou, is based on five levels of care, where people being assessed as belonging to levels 1-3 are cared for by GPs, community practitioners, PHOs and NGOs, and levels 4-5 by secondary care services (Te Pou o Te Whakaaro Nui 2015). Even though the level of primary mental health and addiction service intervention is constantly being matched to the needs of

the person and their family and whānau (Platform Trust and Te Pou o Te Whakaaro Nui 2015), Aotearoa New Zealand currently lacks a wrap-around stepped-care service (Williams, Haarhoff, and Vertongen 2017).

Building on the work from Te Pou, the Closing the Loop initiative from Network 4 PHOs (ProCare, Compass, Pinnacle Midlands, and Pegasus) presents a future vision of primary care based mental health services, based on a stepped care model (see Figure below) (Network 4 2016).

STEPPED CARE MODEL FOR MENTAL HEALTH AND ADDICTIONS SERVICES

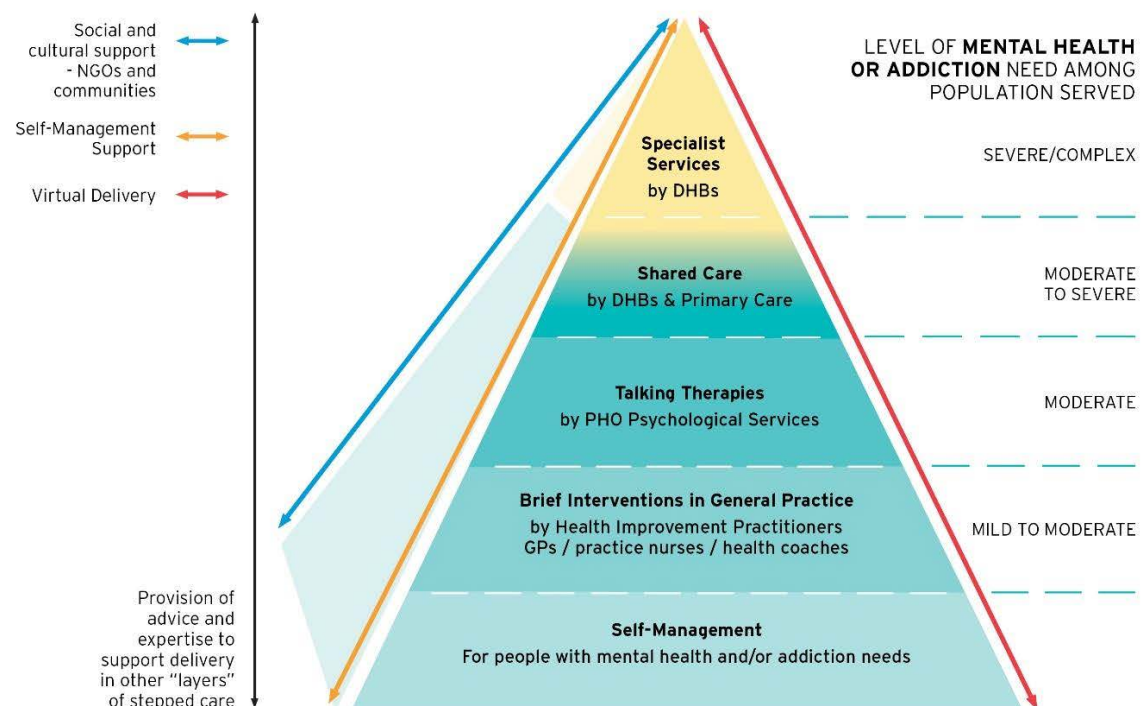


Figure 6 Stepped care model presented by Closing the Loop (ProCare 2017)

Stepped care can be seen as an approach for integrating primary and secondary mental health care. (as discussed in the previous section).

Effectiveness

The implementation of stepped care appears challenging. “When services attempt to implement the recommendation for stepped care in the National Institute for Health and Clinical Excellence guidelines, there were significant differences in implementation and consequent high levels of variation in patient pathways” (Richards et al. 2012). For example, intensive case management for severe mental illness, compared to standard care, may result in increased retention in care, fewer hospitalisations and improved social function (Dieterich et al. 2017). However this review – described

as consisting of very low to moderate quality studies – found no evidence on how the intensive case management influenced individuals’ mental state or quality of life. Patient pathways tend to be highly complex and very variable within and between sites (Richards et al. 2012).

A review of studies from Europe, many in the Netherlands and the USA, concluded that stepped care treatment compared to care as usual reduced anxiety symptoms and increased the treatment response rate, yet this was not found with depression (Ho et al. 2016). Straten et al (2015) similarly found limited evidence to suggest that stepped care should be the dominant model of treatment for depression. Because stepped care interventions vary greatly in number and duration of treatment steps, treatments offered, professionals involved, and criteria to step up, stepped care might be an inappropriate model for treatment organisations (Straten et al. 2015).

“Often services are available to people only once their condition deteriorates, and the dominant treatment options (medication and therapy) do not address the broader social factors that help people be well and support their recovery” (Office of the Health and Disability Commissioner 2018). This observation indicates a current need for stepped care, which is intended to prevent deterioration by ensuring early intervention at a less intensive level.

Into the future

There is no consensus on the structure of the stepped care model. Difficulties arise because of a lack of early intervention options, low commitment by services to involve consumers and their family and whānau in care planning; and coordination challenges within and between services (Office of the Health and Disability Commissioner 2018).

The transition between primary and secondary care (step 3 and 4 of the model) has been reported as challenging. In one example, most individuals discharged from community mental health services engaged with their GPs, on average 3-4 times a year (Stangroom, Morriss, and Soosay 2014), however, the implementation of a stepped care approach is threatened by inadequate integration of primary and secondary mental health services, and staff and resources not being fit for purpose (Thornicroft and Tansella 2004). Primary care reported that of the people discharged from community mental health teams to them, they had access to only 50% of discharge summaries and experienced difficulties communicating with teams about these patients (Stangroom, Morriss, and Soosay 2014).

How a stepped care model is implemented and evaluated is important. Feasible models were viewed to be those that best meet the needs of the people using the services and which are appropriately resourced (Ho et al. 2016). Importantly, all available steps need sufficient funding, allowing for

patients to be smoothly stepped up from low to high intensity treatment (Richards et al. 2012). An enhancement of the stepped care model with technology is likely to enhance its efficacy and efficiency (Ho et al. 2016). The added treatment services on offer, apart from providing more choice for the individual, are also likely to enhance treatment uptake. However, core principles of implementation science, including targeted planning, implementation strategies and clear activity specification, need to be utilised (Richards et al. 2012).

However in December 2017 ProCare PHO launched a stepped care model for mental health pilot in five practices across Auckland (www.closingtheloop.net.nz). This is based on the Closing the Loop vision of primary care based integrated mental health services.

The five themes of Closing the Loop are:

- a mental health and addiction system that achieves meaningful outcomes for populations
- a person-centred place based model of support that enables self determination and wellness
- enablers that effectively support the model, including workforce, technology, ease of access and funding and commissioning structures
- well resourced research, development and evaluation
- the right system leadership

5.3.2 Access to psychological therapies in primary care

Psychological or 'talking' therapies are an evidence based approach to managing mental health and addiction challenges, either as an alternative or an adjunct to medication based therapies. "Talking therapies help people understand and make changes to their thinking, behaviour and relationships in order to relieve distress and improve wellbeing" (Te Pou o Te Whakaaro Nui 2015). There is good evidence that talking, or psychological therapies are effective in the treatment of mild to moderate mental health problems (Laidlaw et al. 2008) and useful for people with more severe problems. Psychological therapies require people to have timely access, a good match with the therapist, flexibility in location and be affordable.

Primary care is where the vast majority of formal health care takes place, and where the majority of mental health and addiction problems are diagnosed and managed, either by primary care alone or in partnership with secondary care organisations and NGOs. The majority of the primary care workload is common mental disorders, including depression and anxiety and stress related health problems. It is therefore an important focus for improving access to psychological therapies.

Primary mental health initiatives

Cost and the limited trained workforce are barriers for people accessing psychological therapies in primary care. Much of the psychological treatment currently available in the community is provided by private providers and is unaffordable to many. Aotearoa New Zealand has attempted to improve access through the Primary Mental Health Initiatives. Primary mental health initiatives allowed PHOs to develop and implement models of primary mental health care which were successful and without any surcharge for people with high-needs, targeting Māori, Pacific and people on low incomes (Dowell et al. 2009).

Some examples:

- The Rural Canterbury PHO offers a Brief Intervention Co-ordination (BIC) service for people with mild to moderate health issues and extended GP consultations for people with mental health concerns (Wynands and Gawith 2009).
- Books on Prescription, another community-based health initiative to increase access to mental health treatment, was viewed by prescribers, librarians and consumers as a positive mental health resource, though they identified that a broader literacy level and topic areas, confidentiality, programme promotion, and training of librarian and prescriber training would be beneficial (Carty et al. 2016).
- An evaluation of a primary mental health initiative for underserved communities – Tu Meke PHO's Wairua Tangata Programme – reported high engagement of Māori (particularly women), high attendance rates, good improvements in mental health assessment exit scores, strong support from stakeholders, willingness of GPs to explore mental health issues and satisfaction of service users (Abel et al. 2012).

Effectiveness

There is now a general consensus that the evidence base for psychological therapies to manage mental health conditions and addictions is strong, with numerous clinical guidelines recommending particular approaches for different conditions, often as first line interventions (D. M. Clark 2018). For example, psychological treatment for depression accessed in primary care was assessed as effective in a systematic review and meta-analysis of 30 studies involving more than 5,000 patients (Linde et al. 2015). In particular, there is strong evidence for cognitive behavioural therapy (CBT) (Linde et al. 2015). Further, brief interventions might be useful for mild to moderate cannabis users for reducing cannabis use and/or associated consequences (Parmar and Sarkar 2017). There is some evidence that CBT-based psychological therapy as well as dialectical behaviour therapy can reduce the frequency of

self-harm for people with a history of multiple episodes of self-harm, though the quality of the evidence is moderate to low (Hawton et al. 2016). Psychological therapies are also preferred to medication by the public: a recent meta-analysis found that members of the public are three times as likely to prefer psychological therapy compared to medication (McHugh et al. 2013).

A large funding commitment has been made in the UK to providing psychological therapies for anxiety and depression, through the Improving Access to Psychological Therapies programme (IAPT) initiated in 2007. A stepped care approach (discussed above) has been used, with an increase in the workforce available to provide low intensity psychological therapies, and access to psychologists being limited to those whose needs are not met by less intensive therapies. A new mental health professional role, the Psychological Wellbeing Practitioner (PWP) has been created to provide evidence-based low intensity psychological interventions such as CBT based self help, psycho-educational groups and guided self-help, and over 10,000 new therapists have been trained (Clark 2018). Evaluation of IAPT has found that it has been effective at increasing access, and has had good effectiveness, with around 50% of patients recovering and two thirds showing worthwhile benefits (Clark 2018). IAPT is now being expanded to focus on improving access for people with long term physical health conditions or unexplained medical conditions (IAPT-LTC), people with severe mental illness (IAPT-SMI).

Other international efforts to increase access to talking therapies are reviewed in Te Pou's 2012 report "Talking Therapies: where to next?" (Te Pou o te Whakaaro Nui 2012).

Challenges

Gaps that challenge Aotearoa New Zealand primary mental health services:

- Pacific peoples remain reluctant to seek help for mental health issues (Ministry of Health 2008; Abel et al. 2012; Dowell et al. 2009) despite primary mental health initiatives working towards being responsive to Māori and Pacific peoples (Dowell et al. 2009). Barriers include a lack of guidelines for services and difficulties influencing cultural beliefs about mental illness (Dowell et al. 2009).
- Primary care and services providing therapy, like health services in general, require more males, Māori and Pacific peoples in the workforce (Abel et al. 2012; Dowell et al. 2009).
- The current primary care funding model encourages GPs and primary mental health nurses to provide the majority of care for a person who attends with mental health challenges. GP practice nurses, who have initial contact with many patients, regularly performing physical

health checks, have the potential to be more involved with patients who present to their clinic with mental health issues (McKinlay et al. 2011).

- The evidence regarding the effectiveness of CBT training for GPs is inconclusive, as study sample size, methodology, training content and design, and assessment of outcomes varied (Dorflinger, Fortin, and Foran-Tuller 2016).

Into the future

Primary mental health funding enabled more access to talking therapies for treatment of mild to moderate mental health problems. However delivery models and services available in both primary and secondary care have been criticised as inconsistent, and it has been argued that a nationally driven strategy is needed to provide direction and consistency of standards (Te Pou o te Whakaaro Nui 2012).

It has been recommended that evidence-based guidelines and routinely collected outcome data are required for the implementation of low intensity psychological interventions in Aotearoa New Zealand (Haarhoff and Williams 2017). Similarly, Williams et al. (Williams, Haarhoff, and Vertongen 2017) recommend efficient utilisation of GP time, a scarce and expensive resource, with:

- a mental health service practitioner to deliver evidence-based low intensity CBT psychological interventions;
- standardised evidence-based psychological interventions, proven to be effective in primary mental health service delivery; and
- a range of psychological interventions including workbooks and the internet.

A range of resources produced by Te Pou to support talking therapies with a range of different population groups go some way towards meeting the need for guidance (<https://www.tepou.co.nz/initiatives/talking-therapies/54>), however there has not yet been a move to expand the low intensity workforce.

Closing the Loop (discussed above) has the potential to increase access, but as at the date of this report there is not yet any evaluation information available from this initiative.

5.3.3 E-mental health to facilitate access

E-mental health (electronic mental health) uses a wide variety of tools, typically behaviour based, that are delivered via the internet or mobile platforms (Eysenbach 2011). It is most frequently aimed at adults with depression or anxiety disorders (Lal and Adair 2014) and has been especially successful for people experiencing post-traumatic stress disorder (Simblett et al. 2017). Four areas are commonly addressed with e-mental health: information provision; screening, assessment and monitoring; intervention; and social support (Lal and Adair 2014).

It is hoped that e-mental health could fill the gap between the identified need for services and the limited capacity and resources available for conventional treatment (Lal and Adair 2014). In particular, these cost-effective low intensity psychological interventions can be used for the increasing numbers of individuals with mild to moderate mental health problems (Haarhoff and Williams 2017). If proven effective, e-mental health therapy, could be widely accessible and cost-effective and could be used as a stand-alone intervention during the initial stage of a stepped care approach, as an adjunct to group sessions, and as a reminder for skill use (Mendelson and Eaton 2018).

Already in New Zealand there are a plethora of resources and self-help tools available online. For example a recent resource from the Health Promotion Agency for young people identifies four main online resources: the Lowdown, Youthline, Sparx, and Common Ground. The Mental Health Foundation provides a comprehensive list of helplines for people in crisis, as well as many resources and links to apps and e-therapy tools. Other websites such as Depression.org, MH101, Supporting Families, the Christchurch based Mental Health Education and Resource Centre, IT Matters (Platform Trust), the Wellington/Hutt Valley Mental Health Addictions and Disability Services website, and many others provide online resources and/or lists of links to online resources. Health Navigator provides many mental health resources including an app library. The Alcohol and Drug Helpline website provides links to many resources and services as well as their own phonenumber service. National Telehealth Services, contracted to Homecare Medical by the Ministry of Health in 2015, provides access to a range of helpline phone services, as well as some online services. These are just some examples of the myriad of ways people can access mental health and addictions support online.

One approach to this proliferation of resources, without clear information on quality, is to set up an **online gateway**. In Finland Mental Hub (mentalhub.fi) provides a single (electronic) door to their online mental health services and resources. A comprehensive array of mental health services can now be accessed from anywhere in the country through a single online portal, which is open to

people seeking help and providers alike [<http://www.finlandhealth.fi/mentalhub-fi-a-single-door-to-mental-health-services-in-finland>].

Similarly in Australia the Head to Health website (<https://headtohealth.gov.au>) supported by the Federal Government Department of Health provides a single online portal to mental health resources including websites, apps and online programmes, forums and peer support, as well as direct contact with professional support via email, phone and chat services. It was set up in 2017 in response to the National Mental Health Commissions Review of Mental Health Programmes and Services, and provides resources for people wanting to increase their wellbeing as well as people in mental distress. A 'bot' provides interactive guidance around the site.

Effectiveness of e-mental health

E-mental health initiatives "improved accessibility, flexibility in terms of standardization and personalization, interactivity, and consumer engagement" (Lal and Adair 2014). The English National Clinical Advisor to IASP (quoted in Haarhoff & Williams, 2017) proposed that increasing the demand for e-mental health would result in more consistent delivery of evidence-based protocols, equal access, reduction in therapy time, ability to treat everyone at the same cost, reduction of stigma and enhancement of outcome evaluation.

Several small Aotearoa New Zealand studies have investigated the effectiveness of low intensity cognitive-behavioural guided self-help programmes. In a cognitive-behavioural guided self-help programme, participants experiencing moderate levels of depression reported a clinically significant reduction in depressive symptoms and increase in quality of life ratings (Montagu and Williams 2017). Similarly, international students of Asian descent in Aotearoa New Zealand reported a reduction of depression and anxiety symptoms, improved quality of life and adjustment to tertiary study and helped remove the barriers of stigma and reluctance to seek help (Lee and Williams 2017).

Research from the United States, Australia and the Netherlands found e-mental health to be cost-effective compared to face-to-face therapy, although start-up, research and development costs are necessary (Lal and Adair 2014). Internet CBT interventions were viewed as cost-effective and often cheaper than usual care (Musiat and Tarrier 2014).

Many studies suggest that clinician-assisted internet-based CBT can be as effective as face-to-face CBT (Andersson and Carlbring 2017). Population groups with positive outcomes following use of CBT online were adolescents with anxiety and depression (Loucas et al. 2014). People who used e-CBT were often satisfied with the treatment, they received personal support – not only from therapists – and this seemed to increase treatment adherence and reduce attrition (Musiat and Tarrier 2014).

Substantial evidence suggests that e-CBT is less resource intensive and has similar effects to more intense treatments (Linde et al. 2015).

Musiat and Tarrier (Musiat and Tarrier 2014) note particular aspects of e-mental health that are under-researched:

- how e-mental health worked for people who lived in isolated areas;
- when people accessed e-mental health;
- how long they had to wait until they could access the treatment;
- the experience of stigma of individuals; and
- and how it influenced help-seeking.

E-mental health initiatives are predominantly used by certain groups, such as females (Meurk et al. 2016; Montagu and Williams 2017) and people who are more educated and socioeconomically advantaged (Meurk et al. 2016; Andersson and Carlbring 2017). Further research is needed on how to effectively incorporate e-mental health into service systems and to apply it to diverse populations (Lal and Adair 2014), in particular Māori and Pacific peoples. An Australian review found that ethnicity was infrequently reported on in e-mental health evaluations (Meurk et al. 2016). More research using rigorous study designs, long-term follow ups, active control conditions, measurement of reduction of incidences of disorders, and evaluation of therapists and coaches who provide e-mental health support is needed (Mendelson and Eaton 2018).

While e-mental health approaches are promising, if they are not appropriate for the groups with the highest needs then there is a risk of further increasing inequalities in mental health and addictions if there is a reliance on these methods. Any initiatives will need to be carefully evaluated for their acceptability and utility to priority populations. There also needs to be an easy way for people to find high quality resources and tools, such as single online gateway.

5.3.4 Responding to crises: high intensity care, immediately

Crisis services have been identified as being an area of mental health services that Aotearoa New Zealand is not doing well in. Shortcomings were clearly outlined in a 2001 report for the Mental Health Commission (“Open All Hours?”) but little action resulted. These shortcomings were again highlighted in the People’s Mental Health Report (Elliot 2017).

One criticism of crisis services is the role of the police. Aotearoa New Zealand police report a high involvement with people in mental health crises (Holman, Brien, and Thom 2018). Police represent a

coercive pathway to care with a likely use of force, which can be re-traumatising for people already in acute distress. In the Waikato region during a five month period in 2016, police used force, most commonly handcuffs, for 78% of cases, with almost half not consequently admitted to hospital (Holman, Brien, and Thom 2018). Māori were overrepresented, but no more likely than Europeans to experience the use of force.

As part of our media analysis, we found service users and family members alike reported that having Police attend when experiencing a mental health crisis was not appropriate; people recalled inappropriate treatment from Police as well as the stigma they experienced when the Police attended; some had experienced long waits in the emergency department because crisis teams did not respond in a timely manner.

Service user and family stories of crisis were highlighted by the media. Often the family members' were affected by suicide; while the service users had attempted suicide. The family stories highlighted by the media recounted their family's interactions with the mental health system, trying to get help, and the subsequent death of that family member. Apart from one positive story, they all featured accounts of service users or families trying to get help for themselves or their family member, encountering mental health services (often crisis services), not being listened to, not receiving the help they asked for and in some instances the family member dying by suicide.

The Mental Health (Compulsory Assessment and Treatment) Act 1992 is used for some people who are experiencing a crisis. On the last day of 2016, approximately 6.1% of specialist mental health and addiction service users, more often males than females, aged 25-34 years most likely and more likely Māori compared to non-Māori were subject to the Act (Ministry of Health 2017e).

Types of crisis services

How crisis care is implemented is important. The UK Crisis Concordat sets out four stages of the crisis care pathway: (1) access to support before crisis point; (2) urgent and emergency access to crisis care; (3) quality treatment and care in crisis; and (4) promoting recovery (Paton et al. 2016).

In a systematic review of the evidence for crisis interventions across these stages (Paton et al., 2016), very little research was found on access to support before crisis point, or on urgent and emergency access to crisis care. Positive evidence was found on the clinical effectiveness and cost effectiveness of crisis resolution and home treatment teams. A large body of evidence for promoting recovery was found.

In the 2001 Mental Health Commission report "Open All Hours? A review of crisis mental health services", crisis respite services were seen as preferred by all stakeholders including service users and

whānau. Community-based (as opposed to inpatient) crisis services are cheaper due to reduced inpatient utilisation, emergency department diversion, and reduced criminal justice involvement (Substance Abuse and Mental Health Services Administration 2014). Similarly, Berrino et al. (2011) found that for people who are acutely suicidal and have been diagnosed with a borderline personality disorder, well adapted intensive care and comprehensive outpatient treatment promises a cost-effective alternative to classic psychiatric hospitalisation. Crisis houses and acute day hospital care are currently recommended by NICE as viable alternatives to inpatient treatment, and are found to be more acceptable to service users (Paton et al. 2016).

People with substance use challenges appear to have limited care choices. Literature reviewing peer crisis services for consumers with substance use disorders was missing, also individuals with primary diagnoses of substance use disorder were missing out on crisis residential care as they usually required longer programmes and medical detoxification (Substance Abuse and Mental Health Services Administration 2014).

Table 5.2 provides examples of some types of crisis services and their effectiveness.

Table 5.2 Crisis mental health services in some US states (Substance Abuse and Mental Health Services Administration 2014)

Crisis service	Description	Effectiveness
Crisis hotline	Free, provides a person in distress with immediate support and/or facilitates referrals via telephone	Qualitative reports and evaluative studies indicate that the mental status of many callers improves during and after calls, representing an asset in the service continuum
Mobile crisis services	Assess and treat people in the community; access to a psychiatrist	Effective at diverting people in crisis from psychiatric hospitalization, good at linking suicidal individuals discharged from the emergency department to services; and better than hospitalization at linking people in crisis to outpatient services
23-hour crisis observation or stabilization	Direct service, provides individuals in severe distress with up to 23 consecutive hours of supervised care to assist with deescalating the severity of their crisis and/or need for urgent care, providing prompt assessments, stabilization, and/or a determination of the appropriate level of care	

Short-term crisis residential care	For individuals in acute psychiatric crises, providing a safe environment for care and recovery	Effective at improving symptoms and functioning, similar to other longer psychiatric inpatient care, rated favourably by individuals who used it and is cost-effective.
Peer		
Peer crisis services	> 24 hours supports (can be longer) for individuals in crisis in community, includes medical support, calming environments	Viewed positively by users, together with available community outreach, a viable alternative to standard hospital care
Warmline	Operated by peers; offer compassion, support for example loneliness, anxiety, and sleeplessness; for less acute emergencies, but issues could potentially escalate if left unaddressed	Reduced ED attendances and was viewed by users as reducing isolation
Psychiatric advanced directive statement	Individual specifies future preferences for treatment in the event of losing mental ability to make treatment decisions	Might help avoid compulsory treatment

In Aotearoa New Zealand both residential peer led crisis centres and Warmline services are in operation.

Tupu Ake is a 10-bed seven-night stay, peer-led, acute admission alternative based in Papatoetoe and owned by Pathways. An evaluation of Tupu Ake found that the service (including the home-like environment and the individualised support) was valued by guests, and was effective in reducing distress and in stabilising people so that further residential support was not needed in the following month (Butler and Kongs-Taylor 2017).

“Tupu Ake captures the best of both worlds when supporting people experiencing severe mental distress” stated the service user-lead author. (Butler and Kongs-Taylor 2017)(p.43)

Emerge Aotearoa, Key We Way in Kapiti is a Peer-run Crisis Respite House which is award-winning and internationally significant. Key We Way is based on the principles of Intentional Peer Support which has been evaluated and found effective.

Example from Scotland: **Distress Brief Interventions (DBI)**

The DBI model aims to provide connected compassionate support for people experiencing distress.

“A Distress Brief Intervention is a time limited and supportive problem solving contact with an individual in distress. It is a two-level approach. DBI level 1 is provided by front line staff and involves a compassionate response, signposting and offer of referral to a DBI level 2 service. DBI level 2 is provided by commissioned and trained third sector staff who would contact the person within 24-hours of referral and provide compassionate community-based problem solving support, wellness and distress management planning, supported connections and signposting for a period of up to 14 days.” www.dbi.scot

DBI is currently being piloted at four sites, with a parallel independent evaluation.

Into the future

Crisis services are the visible coal face of the mental health and addiction system, and are the first to become pressured when services are in high demand, often due to workforce issues and the limiting of services further down the chain. Alternative models to the existing police/emergency department model need to be investigated. Early intervention may ease the pressure on crisis services in the long term. Service user/peer services are an alternative that are promising.

The draft suicide prevention strategy (Ministry of Health 2017a) outlines that supporting people in distress requires the system to be strengthened and the workforce in education, health, police, wider justice and social sectors to be trained in suicide prevention. Other recommendations include the:

- Collection and tracking of data about suicidal behaviours, allowing measurement of suicide prevention efforts;
- Emergency department staff to consistently follow best-practice guidance on caring for people at risk of suicide who present to emergency departments;
- Expansion of the peer support workforce; and
- Partnering with Māori-led services to care for and support Māori who are in distress.

5.4 Services that are fit for purpose

This section looks at mental health services that are ‘fit for purpose’. Aspects of mental health services and supports that are focused on are alternative to mainstream service options, peer led and co-designed services, trauma informed care, least coercive care, zero deaths by suicide in mental health services, and culturally safe services. All of these factors enable services to promote the wellbeing of the people using services by respecting dignity, rights and culture.

5.4.1 Alternative to mainstream, peer-led and codesigned services

Aotearoa New Zealand has a strong consumer movement. In the past it has largely existed outside traditional mental health services, through ANOPS and peer support groups such as GROW and Balance. The Like Minds programme and the Mental Health Commission fostered consumer leadership and the reduction of stigma and discrimination, encouraging people with experience of mental illness to speak up about their experiences. As mainstream services started to see the benefits, consumer advisor positions became part of services. Innovation has also come from the NGO sector, with peers playing a heavy role in the functioning of many of these organisations.

What are the alternatives to mainstream, peer-led and co-designed services?

Peer-led services are services led by people with experience of mental illness (peers). Co-designed or produced services are services that are designed, (or produced) in partnership between people with experience of mental illness and mental health professionals or services:

“We need to be equal partners, have collective ownership and have co-responsibility and there’s no one person who is the boss. Both professional and consumer input must be equally valued and included right from the beginning of the processes” (The Co-design Initiative 2016).

‘Alternative to mainstream’ services are services that have developed from outside the traditional Western medical model of mental illness treatment, but may not have originally developed as peer-led services.

There has been an evolution from providing services to people with experience of mental illness (traditional services) to people with experience of mental illness working for services (e.g. many models of peer support, consumer advisors) to co-design and production, where the power differential is more equal. At the same time, there have always been peer-led services that have operated independently outside the traditional mental health system (e.g. Hearing Voices Network, GROW).

One example of an alternative to mainstream service is **Open Dialogue**. Open Dialogue was developed in Finland and has been adapted for use throughout Scandinavia, and is now gaining

attention internationally as an alternative approach to responding to crisis. It is “a resource- oriented mental health approach, which mobilises a crisis struck person’s psychosocial network resources” (Buus et al. 2017). Open Dialogue was developed as an approach to managing the first episode of psychosis, and results from small cohorts of people treated in Western Lapland showed good functional recovery and reduced need for medication (Aaltonen, Seikkula, and Lehtinen 2011).

Open Dialogue is characterised by its seven principles:

- “1) Immediate help: The first meeting takes place within 24 hours of the first contact.
- 2) A social network perspective: Treatment meetings engage the index person’s social network as integral participants.
- 3) Flexibility and mobility: Therapy is designed to meet the specific needs of each individual, flexible to changing needs, and often takes place at the person’s home.
- 4) Responsibility: The first professional in contact with the family takes responsibility for the first network meeting, hereafter the team takes over the responsibility.
- 5) Psychological continuity: The same team continues to be responsible throughout the whole treatment.
- 6) Tolerance of uncertainty: Decisions about treatment are preferably discussed over several meetings before being implemented. A subsequent treatment meeting is always planned at the end of each meeting.
- 7) Dialogism: During the treatment meetings, the focus is on building up new understanding among the different participants” (Buus et al., 2017 p. 391-392).

Another important example of alternative approaches to services is the **Power Threat Meaning** framework developed by the British Psychological Society (Johnstone and Boyle 2018) as an alternative means of viewing psychiatric diagnosis. Their recent report outlines this approach and the implications it has for psychiatric services.

In traditional mental health practice, threat responses are sometimes called ‘symptoms’. The Framework looks instead at how we make sense of these difficult experiences and how messages from wider society can increase our feelings of shame, self-blame, isolation, fear and guilt.

The approach of the Framework is summarised in four questions that can apply to individuals, families or social groups:

- What has happened to you? (How is power operating in your life?)
- How did it affect you? (What kind of threats does this pose?)
- What sense did you make of it? (What is the meaning of these situations and experiences to you?)
- What did you have to do to survive? (What kinds of threat response are you using?)

Two further questions help us think about what skills and resources people might have and how they might pull all these ideas and responses together into a personal narrative or story:

- What are your strengths? (What access to Power resources do you have?)
- What is your story? (How does all this fit together?)

<https://www.bps.org.uk/news-and-policy/introducing-power-threat-meaning-framework>

An example of a resource for organisations wanting to develop co-designed or produced services is the Mental Health Experience Co-design Toolkit (Anonymous 2014). The MH ECO toolkit was developed in Victoria, Australia and provides any organisation working with consumers and carers with the tools to utilise their lived experience of the service to improve service quality.

Examples of Aotearoa New Zealand peer-led services include PeerZone and Balance Aotearoa.

PeerZone was established by Mary O'Hagan and Sara McCook Weir. PeerZone is a social enterprise that develops and delivers supports and resources by and for people with mental distress. One of their projects focuses on training peers to provide training on peer support. PeerZone started in Aotearoa New Zealand, but is now an international programme (<https://www.peerzone.info/>).

Balance Aotearoa, Bipolar and Depression Network is "a national network set up and operated by consumers to help members who have experienced mood disorders (bipolar disorder and depression) to cope positively with their condition. It acts as an umbrella group for a number of regional support groups nationwide" (<http://www.balance.org.nz/>).

Peer-led services are also very important in the addiction sector. For example the New Zealand Needle Exchange Programme is a peer-based initiative (Hay et al. 2017).

Why are these services important?

These types of services may offer an alternative to mental health services, often operating on the fringes of the traditional mental health system. Or they may work alongside or in partnership with

traditional mental health services. They are slowly becoming more accepted as more mainstream in their approaches. Co-designed services may act as a way of strengthening the consumer voice in mental health services, acting as an example to people using services that they can recover and take leadership positions.

People often confuse 'peer-support' with 'peer-led' services. Peer support is not necessarily peer led. Much peer support now happens within the gambit of traditional mental health services, undertaken by employees of these services.

It is important that these alternatives to mainstream services exist. Innovation is harder to achieve within traditional services (many of which themselves have not been evaluated). Flexible funding models need to be in place. One issue in Aotearoa New Zealand is that while some new, innovative projects are funded as pilots, fewer are evaluated, and then very few attract long term funding. Even more established programmes may be at constant risk of reduction or removal of funding.

Approaches such as Open Dialogue are resource intensive.

Previous recommendations regarding peer led and co-designed services

Aotearoa New Zealand recommendations

There were two documents that address peer roles in the key literature that we reviewed.

Fit for the future: 1) Value the lived experiences of people accessing support and peer roles are an integral part of creating a familiar and relevant workforce, promoting the expertise they bring.

2) Value diversity and choice by offering options of support, including culturally-specific, peer-specific or need-specific options.

3) Provide more access to support by going to the places where people are, in their communities and on their terms, leveraging familiarity and existing relationships. Work with community-based partners that have existing relationships within or are part of the "community". (ThinkPlace NZ Ltd 2017)

Blueprint II: Providing a positive experience of care: strengthen a culture of partnership and engagement in providing a positive experience of care (Mental Health Commission 2012a).

Overseas recommendations

Working in partnership with mental health consumers is now a given. The Canadian recommendations state this succinctly: "People with lived experience and family caregivers must be at the forefront of the mental health system in Canada". Similarly, UK recommendations state that "every person with a mental health problem should be able to say: I am confident that the

services I may use have been designed in partnership with people who have relevant lived experience”.

There are recommendations for consumers to be involved in all areas of the mental health system, including:

- planning, setting policies, and program design (Canada);
- mental health service design (UK);
- setting of research priorities so that they are aligned with those of caregivers and consumers (Australia); and
- development of new data collections (Australia).

Key areas for future focus

Funding needs to be flexible enough to allow for peer-led or co-designed services, as this is where innovation will come from. Funding should not be too flexible however, as these services need some certainty of funding, in order to function well.

5.4.2 Trauma-informed care

What is trauma-informed care?

“A trauma informed care approach orientates staff and systems towards the needs of people who have experienced trauma and best practice approaches that support recovery and prevent additional trauma.” (<https://www.tepou.co.nz/initiatives/trauma-informed-care/181>).

High numbers of people accessing mental health services have experienced trauma. Trauma informed care asks “what happened to you?” and “how can we help?” rather than “what’s wrong with you?” (J. Peters 2018).

“A setting/agency is trauma-informed if the people in that setting realize the widespread prevalence of trauma, recognize the signs and symptoms, respond in an understanding and supportive manner, and resist doing further harm” (Samsha <https://content.govdelivery.com/accounts/USSAMHSA/bulletins/18abe0f>).

Researchers have noted that Māori may be especially impacted by trauma, due to common experiences “that are linked to the experience of colonisation, racism and discrimination, negative stereotyping and subsequent unequal rates of violence, poverty and ill health” (Pihama et al., 2017, p. 18). Given this “it is important to explore and identify practice principles that contribute to the

development of a framework that supports Māori Providers, counsellors, clinicians and healers in working with Māori.” (Pihama et al. 2017).

Why is it important?

Many people with experience of mental illness have experienced trauma in their lives (Ashmore 2013). As well as adverse childhood experiences (ACEs) people who experience severe mental health problems have a higher prevalence of intimate partner violence and revictimisation than the general population (Ashmore 2013). Historically the clinical focus has been on Post Traumatic Stress Disorder, a narrow lens, “which is not applicable to the wider population health and physical health issues around trauma” (J. Peters 2018).

A report from The Department of Health in England, which commissioned the Institute of Health Equity to develop the evidence base around the wider social factors that shape health outcomes and contribute to health inequalities, and to support programmes and policy making at local, national and international level; found in 2015:

Acting to prevent ACEs could improve health, reduce inequalities and save money. Taking action on the causes, prevalence and impacts of ACEs is therefore necessary in order to improve health, reduce inequalities within generations, prevent the transmission of disadvantage and inequality across generations and improve the quality of children, young people and adult’s lives (M. Allen and Donkin 2015).

Peters notes: “Trauma is increasingly being seen as a public health issue by several countries. Utilising the Ottawa Charter and Health in all Policies approaches to improve the health of the population are suggested by many authors. It is a cross-government issue (e.g. Health and importantly mental health, addiction and Primary Care), Education, Justice, Oranga Tamariki etc.), across cultures e.g. Pākehā, Māori, Pasifika groups, Asian etc. and across ages (the lifespan) and across the many diverse groups within our communities... The overall aim is prevention of physical health and mental health/addiction problems; and promotion of knowledge, cultural safety, emotional/psychological safety, resilience and wellbeing for all people.” (2018). With no standard practise in how to implement trauma informed care, according to Ashmore: “A lack of guidance on implementation of TIC has left practice development up to individual interpretation of theory, producing potential safety risks and systems that may not be trauma informed.” (Ashmore, 2013, p. 121).

An international addiction leader Dr Gabor Mate from Canada stated: “the treat addiction, treat trauma”. This is widely accepted as true by the addiction sector in New Zealand but little has been done for the workforce. With addiction funding being 10% of mental health funding we have a way

to go before we will have a trauma sensitive addiction workforce (personal communication J Peters 2018).

Key strategies for improving access to trauma-informed care

“A public health framework is critical for understanding risk and protective factors for trauma and its aftermath operating at multiple levels of influence and generating opportunities for prevention at each of these levels:

- Primary prevention efforts should be aimed at preventing exposure to trauma itself.
- Secondary prevention should be directed at the prevention of trauma-related sequelae.
- Tertiary prevention should slow the progression of trauma-related illness and disability.”
(Magruder, McLaughlin, and Elmore Borbon 2017)

SAMHSA in Philadelphia developed a model for undertaking this work across government, communities and in organisations (SAMHSA 2014).

Trauma-informed care does not only have a place in mental health services. Examples of other sectors where it has been implemented include the education sector and the justice sector (McGlue 2016).

SAMHSA has stated that “Adopting trauma-informed policies may require a fundamental cultural shift within organizations intended to promote a greater sense of equality and safety. This may lead to changes in governance and leadership; organizational policy; engagement and involvement of people in recovery, trauma survivors, consumers, and family members; cross-sector collaboration; services and interventions; training and workforce development; protocols and procedures; quality assurance; budgeting and financing; evaluation; and the physical environment of the organization.” (<http://www.engagenz.co.nz/?p=6347>).

What is happening in Aotearoa New Zealand?

A public health, cross-government, coordinated approach for trauma informed care is needed in Aotearoa New Zealand (J. Peters 2018).

Oranga Tamariki is already training some staff and several NGOs are working in this area (e.g. Pathways, Te Pou, Werry Workforce Wharaurau, Le Va and the Brainwave Trust), and some DHBs are actively promoting a trauma-informed approach (e.g. BOP DHB which has been training mental health and addiction staff in a small way for some time) (J. Peters 2018). Te Pou is also providing resources for mental health staff.

“Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017 [Ministry of Health] and Let’s Get Real [Ministry of Health, 2008] are... clear about the importance of trauma-informed care as a priority and competency for those working in mental health and addiction” (Ashmore 2013).

The principles of trauma-informed care fits with the work being done in Aotearoa New Zealand on the reduction of stigma and discrimination (Like Minds, Like Mine) and with other Aotearoa New Zealand efforts (e.g. Family Violence and the National Depression Initiative) as well as all other public health initiatives (alcohol, sun safety, healthy food, safe driving, etc.). It also fits with the elimination of seclusion and restraint, and suicide prevention (J. Peters 2018).

“Trauma Informed Care is growing as a philosophical understanding of mental health issues within Aotearoa. While Te Pou made a major contribution to the implementation of Trauma Informed Care, and initial training of health care providers, through hosting dedicated training in 2011, few government strategic mental health and addiction services (MH&AS) documents explicitly support a dedicated investment in this approach, and there is no discussion of the need for specific Kaupapa Māori based provision or the need for education that focuses upon Kaupapa Māori of those health care providers delivering Trauma Informed Care”. (Pihama et al. 2017). This has led to a Māori-specific model being developed to better meet Māori needs.

“A Māori specific Trauma Informed Care approach follows from models like Te Whare Tapa Wha, providing detail in the form of principles of practice that can guide Māori and non-Māori practitioners in working effectively and competently with tangata Māori. Further Māori specific trauma research has already been engaged in Aotearoa and the proposed research would add to this growing body of knowledge.” (Pihama et al., 2017, p. 25).

Dr Monique Faleafa says Le Va are currently exploring the effects of trauma on Pasifika communities. The thinking is that some of the early work undertaken by Werry Workforce Wharaurau could be adapted for this use.

Into the future

Trauma-informed care is not a new model to mental health Aotearoa New Zealand, however it is new for addiction services. References to it in mental health and child agencies go back to before 2005. It has gained some mainstream support, in that small amounts of specific training through the mental health workforce development organisations have been available, yet it is seen as a separate approach, rather than one which is integrated throughout the mental health system.

Implementing trauma-informed care would be assisted by “a national agenda to pursue trauma informed changes to mental health systems. Such support needs to consider the reframing of mental health services and look at measures to challenge the current siloed funding arrangements in order to facilitate partnerships that are more effective.” (Ashmore, 2013, p. 122). Part of this agenda could be assessment of trauma.

Peters suggests looking at whether an approach to trauma-informed care by the Scottish government could be implemented here in Aotearoa New Zealand: “The Scottish Government has a national across-government department specifically for trauma work. It has led an excellent trauma informed framework for the workforce (in its application to the entire workforce, the framework reflects the important roles of staff working in a broad range of settings - for example physical health, criminal justice, education, social care) to realise the high prevalence and broad impact of trauma, to recognise the impact of trauma in the people they serve, and to adapt practice accordingly in order to achieve positive outcomes) (NHS Scotland 2017). This could be used to guide work in Aotearoa New Zealand with obvious cultural and contextual adaption required.” (J. Peters 2018).

Pihama et al (2017) contend “That in order to grow an understanding of Indigenous approaches to Trauma Informed Care that can positively impact on the healing experiences of Māori there must be (i) the development of Kaupapa Māori and Indigenous approaches to healing the collective impacts of Historical and Colonial Trauma and (ii) a clear critique and understandings of the limitations of imported individualistic western approaches that currently dominate the construct of Trauma Informed Care in Aotearoa”.

People in prisons are disproportionately affected by trauma. International studies estimate that rates of trauma histories among women in prison are as high as 90% (McGlue 2016). “Prisons are full of unavoidable triggers for trauma sufferers and institutional security will continue to be a primary function of prison staff. However, this does not mean that trauma informed practices cannot be introduced in a prison environment, and early evidence indicates wide ranging benefits for women in prison and prison staff.” (McGlue 2016).

5.4.3 Least coercive mental health and addiction services

Mental health services are in the unique position where if a person is a serious danger to themselves or others, that person may be compelled to accept mental health treatment and may be detained against their will. The Mental Health (Compulsory Assessment and Treatment) Act 1992 has been criticised for its lack of human rights focus (Changing Minds 2014) and many people have called for it to become consistent with the United Nations Convention on the Rights of Persons with Disabilities

(Gordon and Brien 2014). At the very least, the changes in mental health policy (moving to a recovery model) over recent years do not fit well with a mental health act that allows for compulsory detention and treatment based on a person's 'mental disorder' or disability (Gordon and Brien 2014).

The recent passage of the Substance Addiction (Compulsory Assessment and Treatment) Act 2017 means that the potential for coercion in addiction services is now increased, although it is as yet unclear how widespread the use of the Act is likely to be.

It has been suggested replacing the current legislation with legislation based solely on a person's impaired decision making capacity, without taking into account any form of 'disability' could be a way forward (Gordon and Brien 2014). The same standard would apply "to the person with a diagnosis of schizophrenia, dementia or delirium, or the person with no diagnosis at all but who lacks capacity." (Gordon & Brien, 2014, p. 61).

One controversial aspect of 'coercive' care is seclusion in inpatient wards. "In a seclusion episode, the service user is placed by themselves in an area or room from which they cannot freely exit. The use of seclusion is commonly justified as a way of keeping patients and staff safe on the ward. However, evidence for the value of seclusion as an intervention is lacking." (McLeod et al., 2017, p. 30). In Aotearoa New Zealand, Māori have a significantly higher rate of seclusion than non-Māori (McLeod et al. 2017).

"Some services use restrictive practices such as seclusion and restraint to try and reduce harmful events. However, a recovery approach that includes a more open environment is central to the philosophy of care in mental health and addiction services." (<https://www.hqsc.govt.nz/our-programmes/mental-health-and-addiction-quality-improvement/questions-and-answers/>).

DHBs have been given a target to eliminate the use of seclusion in inpatient wards by 2020. Te Pou has partnered with the Ministry of Health and the Health Quality and Safety Commission to provide resources for mental health services to help reduce the use of seclusion. (<https://www.tepou.co.nz/initiatives/reducing-seclusion-and-restraint/102>). The HQSC also recently held a national event marking the 'beginning of the end' for seclusion.

Compulsory treatment is only one aspect of coercion, coercion may be informal as well as formal. People may feel they have to accept aspects of treatment from mental health services, without there being any legal basis to force them to do so. Informal coercion is common in mental health services, with one study suggesting between 29-59% of service users experiencing it (Hotzy and Jaeger 2016).

5.4.4 Zero suicides in mental health services

In 2018, the Mental Health Commissioner called for a zero tolerance approach to deaths by suicide by people using mental health services (Office of the Health and Disability Commissioner 2018). He also favoured a reduction target for deaths by suicide in Aotearoa New Zealand. This is in line with the international “Zero Suicide” movement. <https://zerosuicide.sprc.org/>

The Suicide Mortality Review Committee was appointed in 2014 to undertake a feasibility trial focusing on three groups of people who had died by suicide. One of these groups were people who used mental health services. In the period from 2007-2011, 829 people using mental health services died by suicide. (Suicide Mortality Review Committee 2016). In addition to a quantitative analysis, a qualitative system’s review was undertaken focusing on coronial and DHB inquiries into suicide deaths of people using mental health services. A number of discussion points came out of this review, as to issues surrounding these deaths.

Key points were: the complexity of people’s situations; the conclusion that nothing could be done; people’s large number of contacts with mental health services; not knowing what to do if things did not appear to be working; large numbers of risk assessments; using crisis services for an extended period of time; the service fixating on compliance, past behaviour and doing what has always been done; and the power struggle between the person and the service (Suicide Mortality Review Committee 2016).

The National Action Alliance for Suicide Prevention (National Action Alliance for Suicide Prevention: Transforming Health Systems Initiative Work Group, 2018) has published an in-depth discussion on preventing suicide deaths in health care services, and developed a framework of recommendations for standard care of persons at risk of suicide across emergency departments, primary care, outpatient and inpatient mental health service settings.

5.4.5 Culturally competent, culturally safe services

The importance of providing health services that are culturally safe was discussed in Chapter 4 (section 4.2).

Betancourt and colleagues (2003) defined a practical framework for cultural competence development, consisting of interventions at three levels:

- Organisational cultural competence – ensuring that the leadership and workforce is diverse

- Structural cultural competence – ensuring access to appropriate services including interpreters, culturally and linguistically appropriate resources, ethnicity data protocols to ensure accurate data for monitoring
- Clinical cultural competence – enhancing provider knowledge, skills and attitudes to work cross-culturally

An example of an effective cultural competency initiative operating at both clinical and organisational levels is the work of Le Va, which includes the Engaging Pasifika training programme for clinicians, organisational cultural competency guidelines (see Figure below) and the *Futures that Work* programme to grow the size and skills of the Pasifika workforce (Faleafa and Pulotu-Endemann 2016).

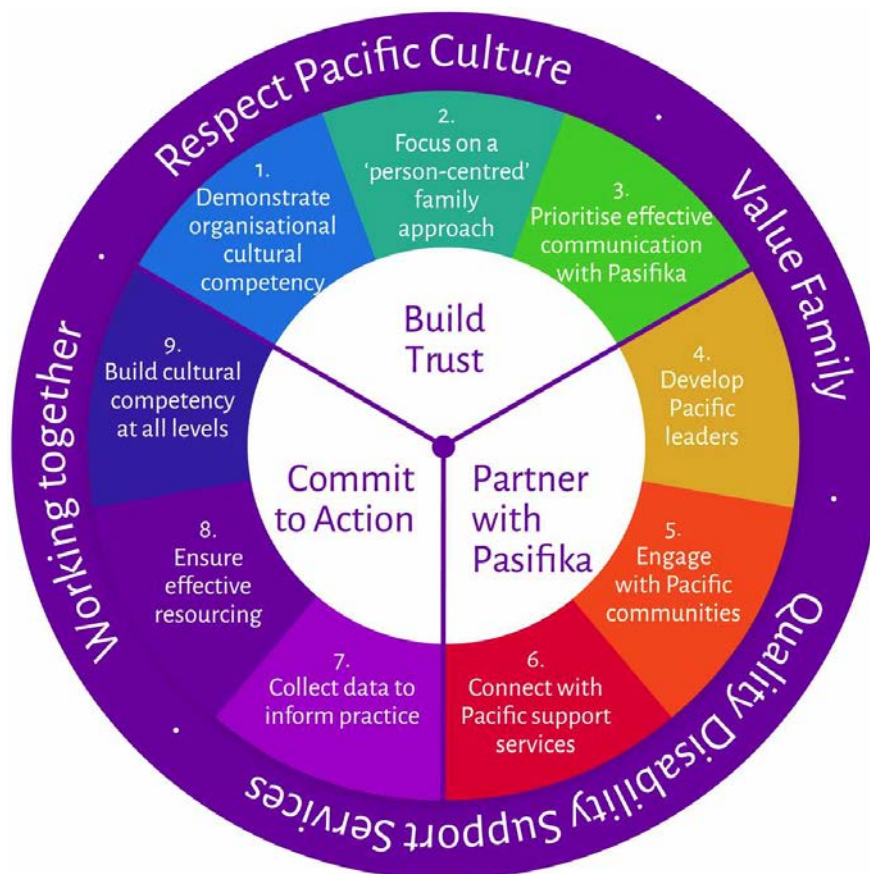


Figure 7 Le Va organisational guidelines for Pasifika cultural competency source: (Faleafa and Pulotu-Endemann 2016)

Chapter 6 Systems change for wellbeing and mental health

Key points

Leadership to drive change and hold health and other sectors accountable for action towards improved mental wellbeing and reduced inequalities. An independent commission is one model for ensuring sustainable and independent leadership. However leadership, including Māori, Pacific and peer leadership, is needed at all levels of the sector. A new Mental Health Commission could build on the momentum of participatory democracy exemplified in the Action Station People's Mental Health report,

Fragmentation of the mental health and addiction sector is also an issue. Access, integration and sustainability all need to be addressed to ensure a seamless process for people using the mental health system. Currently, there is little room to do anything beyond the current model. Health service providers are working at capacity, if they do try an alternative approach their service's own viability may be undermined, and funding and funding models are issues. The workforce, particularly for delivering psychosocial therapies, is a key area of need. Career pathways are important for all those involved in the sector, including peer workers.

A good mental health data system would collect a range of information relevant to mental health and addiction including incidence and prevalence, wellbeing, service use, service quality and performance. New Zealand has no national collection for primary care data. Information on primary care interactions is not easily accessible. Mental Health research in New Zealand is currently fragmented and there is no dedicated strategic funding for mental health and addiction research.

Most of the determinants of health, and particularly mental health, fall outside the control of the health sector. Finding ways to cement collaboration between the sectors is therefore key, and there are a number of promising local and international models. One area of particular policy importance for mental health and addiction is child policy. New Zealand has sufficient knowledge and the means to create its own form of world-leading child-friendly public policy and there are promising signals of change.

6.1 Introduction

This chapter draws together system level factors needed to make change in the way Aotearoa New Zealand society promotes and protects wellbeing and responds to those in need. International and local reports and strategies, as well as published literature and local systems information are used to consider the four key areas relevant to strong mental health systems: of leadership and accountability, cohesion and coverage, data and research, and high level integration for a mental health in all policies approach. Key international documents include recent strategies from Scotland, Australia and Canada.

First, leadership and accountability are key areas/enablers identified internationally and locally, and were the drivers for Aotearoa New Zealand's original Mental Health Commission. Models of leadership in mental health, particularly the role of independent commissions, are considered.

Second, fragmentation of services is another barrier to action for mental health identified locally and in other jurisdictions. This section considers the structure of the Aotearoa New Zealand health system and ways in which gaps and fragmentation occur. Policy responses to fragmentation including the role of funding mechanisms are considered. Workforce needs are also considered.

Third, reliable data is key to understanding the burden of mental health and addiction problems and the effectiveness of interventions. Systems for utilising routinely collected data, as well as other kinds of qualitative data and research, are considered. Aotearoa New Zealand's current mental health data infrastructure is reviewed and important next steps are identified.

Finally this section considers integration at the policy level – what a mental health in all policies approach could look like. Because of the importance of early life in wellbeing through the life course, approaches to embedding children's wellbeing in all policies are also considered.

Key findings of this section highlight include the role of independent Mental Health Commissions in providing leadership and accountability, and the data needed to implement and evaluate change to improve mental health.

6.2 Leadership and accountability

The lack of leadership in the mental health sector in Aotearoa New Zealand was highlighted in the most recent report from New Zealand's Mental Health Commissioner:

"Currently there is a lack of integrated, collaborative leadership in the sector. This is reflected in the failure to track tangible progress against the 2012–17 plan Rising to the Challenge, and to develop a plan to succeed it. ... [This] must be addressed by ensuring the collective experience and commitment of the sector is harnessed to ensure the next plan of action has widespread support and, just as importantly, that there are robust leadership structures and accountabilities to implement a new action plan." (Office of the Health and Disability Commissioner 2018)

It is also something that was highlighted more than 20 years ago by the Mason Inquiry:

"Given the current state of Mental Health leadership in New Zealand, we believe that such an approach is illusory. It would create an expectation in the Mental Health sector and amongst families and consumers, which could not be met. That would be devastating.

Above all else it is imperative to establish an organisation which will take control of the existing fragmented services, and develop a quality service within five years. In our view the Mental Health sector is now looking for certainty and consistency in its future development. A nationally recognised leader, clearly mandated, is necessary if those goals are to be achieved." (K. Mason 1996).

The Inquiry under section 47 of the Health and Disability Services Act 1993 in respect of certain mental health services (K. Mason 1996), otherwise known as the last Mason Inquiry, was set up to review the availability and delivery of mental health services in Aotearoa New Zealand. The report of the Inquiry (the Mason Report) made five specific recommendations: the establishment of the Mental Health Commission; a mental health strategy they called a blueprint; a public awareness campaign focusing on stigma and discrimination associated with mental illness (which became Like Minds, Like Mine); a research and development programme; and ring fenced mental health services funding. All of these recommendations were implemented.

One of the more visible outcomes from the Mason Inquiry was the establishment of the Mental Health Commission in 1998, to "act as a catalyst to improve performance and lift the priority given to Mental Health in New Zealand" (K. Mason 1996). Originally, it was envisioned that the life of the Commission would be short, with hopes from the Mason Inquiry panel that it would "take note of our views, to recognise the general direction in which that service should be moving and to turn words into action." (Mason 1996, p. 178).

The Commission aimed to provide leadership and accountability to the mental health sector, developing the first Blueprint to guide ongoing service development. It particularly emphasised the

key roles of service users and family members in the mental health sector. The Mason Inquiry members had wanted the Commission to take over purchasing, service provision, and policy making of mental health services, but this recommendation was not adopted and those roles remained with the Ministry of Health and the Regional Health Authorities (Mental Health Commission 2007).

The Commission's life was extended with the revision of its legislation in 2007, however it was widely perceived as having lost its teeth, and no longer providing leadership for the sector. It was dis-established in 2012 with the position of Mental Health Commissioner being subsumed into the Office of the Health and Disability Commissioner. Lessons learned from the previous incarnation of the Mental Health Commission are that its purpose needs to be clear, it needs to have a mandate for leadership and its activities need to be respected by the sector.

Aotearoa New Zealand led the way with its establishment of the Mental Health Commission. Other countries have followed us, in particular Australia and Canada, in response to their own fragmented and disjointed services. In a 2017 report on setting up an Office for Mental Health in the Australian Capital Territory, Australian services are described as not having a "solid, coordinated and integrated approach to service delivery" (ACT Government 2017, 5). Instead they are confusing and fragmented. An Office for Mental Health is seen as a way to provide leadership to the system and promote conversations on what works well (ACT Government, 2017), much in the same way as our previous Mental Health Commission did.

A review of the characteristics of mental health commissions in different countries (Rosen, Goldbloom, and McGeorge 2010) identified two models of commission: one taking a narrow regulatory or inspectorial model (similar to the role played by the Office of the Director of Mental Health at the Ministry of Health in New Zealand); and a broader model with system-wide service development and monitoring function. The second type was the model adopted by New Zealand's Commission. In some jurisdictions (including Western Australia) this model has been taken further and has included budget holding and commissioning (as the Mason Inquiry originally recommended for Aotearoa New Zealand). The review concluded that broadly focused Commissions can contribute to the enhancement of resources, the sustainability of services, the proper implementation of reforms (if they have influence at the highest levels of government), and "can encourage, champion and monitor the transformation of services into more evidence-based, community-centred, recovery-oriented, consumer, family and human rights-focused mental health services" (Rosen, Goldbloom, and McGeorge 2010).

While cooperative leadership is needed at all levels of the mental health sector, the role of independent oversight of the sector is an important and currently missing piece of the puzzle for Aotearoa New Zealand. The 2017 People's Mental Health Report produced by independent

community campaigning organisation Action Station also recommended fully independent oversight of the mental health system, by a restored Mental Health Commission, or other models such as a Disability Commission or dedicated mental health commissioners under the Human Rights Commission (Elliot 2017). Unifying national leadership has the potential to combat the current fragmentation, with DHBs and PHOs and NGOs independently developing responses to common issues, by providing an up to date evidence base and guidance and clear direction. It also has the potential to redirect the focus of the mental health response and resource away from secondary services towards a public mental health response with a focus on promoting wellbeing and prevention.

Any Commission will need to include the mental health and wellbeing of Māori at its heart. First, especially because of the special relationship under the Treaty of Waitangi and status of health as a taonga under Article 2. Second, because Māori bear a disproportionate burden of mental illness compared to their population share. Some have argued that on top of poorer socio-economic and general health status, an underlying reason for the burden of mental illness among Māori is intergenerational trauma and profound disempowerment within society (Lawson-Te Aho 2014). Any mental health governance /oversight body should include and support Māori values and worldview, validate Māori ways of understanding mental wellness, and enact the principles of the Treaty of Waitangi. Without enshrining Māori ways of approaching mental wellness and involving Māori in governance, services will not meet their needs (Mason Durie 1999). Similarly, Rangihuna et al (2018) note that the Western paradigm does not meet Māori needs and demonstrate that services designed and delivered according to Māori worldviews have promising outcomes. This is the exception not the rule. For services underpinned by Māori worldviews and principles to become normal, strong Māori presence in governance and accountability arrangements is vital. Māori governance arrangements were a key part of New Zealand's previous Mental Health Commission. In moving towards a holistic and relational concept of wellbeing it makes sense to put indigenous concepts of wellbeing at the centre of that work.

Any Commission will also need to have the people who experience mental health and addiction problems at its heart with clearly designated roles, including leadership roles, for people with lived experience. Again, this should build on the success of the work done by the previous commission, but also learn from that experience.

Any new institution should also learn from and work with organisations such as Action Station who have been successful at enabling participation in advocacy for social change and galvanising community voice. More than 500 people submitted stories to the People's Mental Health Review, a grass roots crowd funded initiative conducted by Action Station aimed at hearing the voices of

people using and working in services about how well those services were functioning (Elliot 2017). Such organisations have harnessed what has been dubbed the New Power, the open, participatory and peer-driven power that some argue is shaping our modern hyperconnected society (Heimans and Timms 2018). A Mental Health Commission that takes an open and participatory approach is likely to have a stronger mandate and remain more relevant than one which takes a more traditional approach to public engagement.

Effective and diverse leadership is also needed at every level of the mental health and addictions workforce. Programmes to increase the diversity of leadership such as Le Va's Le Tautua emerging Pacific leaders programme provide a model for increasing the cultural diversity of mental health leaders. Leadership from peers and the peer workforce is also important, as was discussed in section 5.4.1.

6.3 Cohesion and integration

6.3.1 The Aotearoa New Zealand health system and mental health

As noted above, fragmentation of the mental health sector is an issue for Aotearoa New Zealand, as it is for other countries. To understand the reasons for fragmentation it is important to understand the nature of the system.

The Aotearoa New Zealand Health system is made up of a network of different providers (See fig 1, appendix 1). The system is largely funded through taxes. Money flows to the 20 District Health Boards that plan, fund and provide all public services within their geographic region, funding mental health services, as well as Primary Health Organisations (PHOs) which are the umbrella organisations for primary care providers. Aotearoa New Zealand's health system is primary care oriented (A. King 2001). Primary care is the gateway to the rest of the publicly funded system. Most New Zealanders interact with the health system through their general practices. Health policy requires an emphasis on prevention and management in the primary care setting, and in the community, with appropriate referral to secondary services. Currently Aotearoa New Zealand health policy focuses on integration, access and sustainability. There are elements in most health systems policy that aim to improve these three features (Minister of Health 2016).

In the mental health system the network elements of the wider health system are writ large. Policy is overseen by the Ministry of Health. Apart from some services purchased nationally (e.g. health promotion campaigns, forensic services) mental health funding is administered by DHBs whose purchasing decisions are governed by the Commissioning Framework for Mental Health and Addiction (Ministry of Health 2016), formerly the 'Blueprint' documents. Rules attached to mental

health funding mean that a DHB cannot spend less than in a previous year and funding is focussed on the most unwell 3% of the population (Ministry of Health 2016).

Since the 1990s all but the most seriously ill people have been cared for in community settings (WHO, 2014). In Aotearoa New Zealand in 2016, 91% of people accessing specialist mental health services accessed them in the community only (Ministry of Health 2017e). For the 3% with the most serious illness, current mental health services are a mix of hospital and community based, community services publicly funded and provided by a mix of public, NGO and private services. Around 350 NGOs provide community based or residential services that include support, counselling, supported activities and hangout spaces. Specialist psychiatric/psychological support usually comes from a community based team, but ongoing practical support and support with daily life is provided by NGOs.

Access, integration and sustainability

As with the whole Aotearoa New Zealand health system, the mental health system faces the perennial problems of access and integration: two sides of the same coin (Gauld 2013), which contribute to system sustainability (Minister of Health 2016).

In terms of access, primary care is Aotearoa New Zealand's gatekeeper to specialist services and the area where mild to moderate mental illness should be managed (WHO & WONCA, 2008). Yet access to mental health services is strongly affected by the financial barrier to primary care: most practices have fees (Loh et al. 2015). This cost barrier disproportionately affects poorer populations who are more likely to experience mental illness (Ministry of Health 2016a). This fee structure impacts directly on system integration. It is very hard to offer seamless access to services if there are fees for some services but not others. The presence of fees further frustrates integration of mental health services - vertically with secondary mental health services and horizontally with other health and social services. It is very hard to create a seamless experience for service users. The cost barrier is added to other service barriers (location of services, opening times or service appropriateness) (Ministry of Health 2016a).

In terms of sustainability the health system is looking to make services more viable in the face of demographic changes - ageing population, change in population ethnic makeup, changing patterns of illness and an ageing workforce - and a lower tax revenue to fund increasing need. This means looking at the range of services, and how they are delivered, as well as the assumptions behind how much it costs to deliver services. If general practice is to remain the gatekeeper to the whole system then assumptions about how services are funded must be addressed. For example, the general practice consultation is generally 15 minutes long. This is often not sufficient time to deal with mental distress or addiction. The policy setting, model of care, and primary care capitation would all

need to be adjusted in order to adequately account for the increased time needed to appropriately manage mental health conditions. Clearly, reconsidering financial sustainability is inextricably linked to sustainability of services. The WHO strongly recommends aligning mental illness with existing chronic illness strategies and services, linking them to a model of care that already works for ongoing illness with possible episodic exacerbations (WHO and the Calouste Gulbenkian Foundation 2017). The Australian federal government increased both the subsidy and the range of issues covered by Medicaid, which meant that cost barriers were reduced. This was coupled with a gradual refocusing of funding to prevention and community-based services (Australian Institute of Health and Welfare 2018).

Why is fragmentation/lack of integration such a problem in the mental health system?

Governance and accountability may be distributed throughout a network. Having different organisations providing a range of services is not inherently problematic. However, there is a fine balance between having distributed service provision with a choice of providers and fragmented services which is not good for providers or service users. For providers sustainability problems arise because they are too small, there are gaps in services within a particular area and this gap means that people miss out on the services that they need. Services are forced to focus on their own sustainability at the expense of what service users need.

Further, if the network is too diffuse, it is very easy for gaps to appear, for inefficiency to occur or for people to struggle to navigate services. Meanwhile the number of people a service may see potentially shrinks as services become increasingly specialised with narrower eligibility criteria. If funding is too tight, and eligibility too narrow, services in a system can focus too much on their own requirements and sustainability at the expense of service user need and a seamless experience. These service issues strongly affect people living with mental illness who are a particularly vulnerable population. Navigators/case managers often help with organising services because cognition may be temporarily impaired by the illness. However, if navigation services are the norm for those who are not severely ill/experiencing disruptive symptoms to access the correct range of services, then there may be a problem with the fragmentation and complexity of the system.

As noted above, the Aotearoa New Zealand mental health system is very much a network. In terms of cohesion and integration, this model does not guarantee a seamless experience for the service user (even if it ensures a range of choices between services). The funding model of DHBs letting contracts has allowed many niche services to spring up (World Health Organisation 2014). Thus, for moderate to severe mental illness, the range and comprehensiveness of community-based services can be variable within a geographic region (irrespective of Blueprint rules). On the other hand mild to moderate mental illness is mainly managed by primary care in a reasonably uniform manner.

Following the Mason Report, Aotearoa New Zealand's health policy has allowed a wide range of contracts to be let to ensure a range of different providers meet the different cultural and social needs of mental health consumers. However, unlike primary care (which has gone through a period of consolidation from 2010-2016) there has been little consolidation in the mental health sector.

6.3.2 Restructuring the system – international and local models

There is no one 'right' model. Context matters because each country's system reflects its history, political ethos and prevailing societal views and values (Roemer, 1992).

A good understanding of the facilitators and blocks to reform is vital. Path dependency of health systems and a lack of funding and sustainability of providers are major hurdles for reform; many service providers in Aotearoa New Zealand are small and precarious in their funding and service sustainability. Further, because of the way in which DHBs manage contracts there is very little room to do anything beyond the current model; because money is committed for three year periods, there is no marginal funding to pilot a programme or prove a concept.

The WHO notes that countries need to have the appetite to reform and a clear vision of what the outcome of the reform may look like. Whatever the vision, the WHO argues that it is vital to act quickly because most countries simply cannot afford not to act given the economic and social costs of mental illness (World Health Organisation 2013).

Health systems are encouraged to restructure to increase universal health coverage and bolster primary care. Much of the success of funding models and integration and coherence rests on how well the aim of universal health coverage (UHC) is enacted. UHC aims to increase the range of services, to more people (with focus on those with high needs or unmet needs) that is affordable to the service user and the country as a whole.

What would be needed for sector to work in a more integrated way?

In Aotearoa New Zealand and overseas creating a sector that is working together is a threefold problem. First, health service providers are already working at capacity and may not have the time or mental space to imagine doing something differently. Second, if they do try an alternative approach their service's own viability may be undermined. Thus, any attempt to re-imagine must be done with an investment to free up people's thinking. If there is no short term financial penalty for doing things differently, services *will* do things differently. Third, in Aotearoa New Zealand it could be argued that in absolute terms there is not enough money invested in mental health, and that as well as a 'change management' one off payment there must be an increase in funding applied to delivering ongoing mental health services. The link with primary care should not be ignored; the primary care funding

via the capitation payment calculation would need to be revised and funding for different models of care released if primary care were to become more responsive to mental illness.

The WHO policy options paper on investing in mental health internationally includes certain features of more successful mental health provision:

- a) Determinants of health and attention to mental health in all policies (WHO).
- b) Health promotion – rolling destigmatisation programmes and mental health awareness campaigns.
- c) Recognition that there may be a hump – it may cost more in the short term.
- d) Vertical integration – linking in with existing successful services, especially chronic disease management services and/or primary care services.
- e) Making primary care a first contact and ensuring that there is time and skill in primary care to undertake or oversee early intervention.
- f) Changing expectations about workforce: change the assumption that a doctor or nurse will be the first point of contact – other health workers may need to be deployed to ensure that people are seen in a timely way (WHO and the Calouste Gulbenkian Foundation 2017).

Funding models, with policy settings to enable them, are important for integration

Funding models are important for integration, but are not independent of the overall health and social system configuration. International experience shows that funding models will only act as an enabler to better health outcomes if they are backed by strong policy that permits funding to be (re)allocated in ways that are responsive to mental health improvement (WHO and the Calouste Gulbenkian Foundation 2017). Further, policy settings must support integrated services that work together in a cohesive manner for the service user.

Aotearoa New Zealand's mental health services are primarily funded through tax (whether administered via Vote Health or other votes), with other funds from ACC (if injury or sexual abuse is the cause of the illness). Funding is then passed on to DHBs who administer these funds according to the Blueprint II. The funding rules in the Blueprint I and II ringfence mental health funding and requires that in any year a DHB may spend no less than it spent the previous year on mental health. However, protecting the level of investment does not mean that the investment will meet needs. In 2010 the Mental Health Commission (2010) identified that funding drives a focus on inputs and outputs not service effectiveness; overemphasis on secondary care at the expense of early intervention; poor integration of services and little funding flexibility. The Blueprint II (Mental Health Commission 2012b) recommends how the funding is spent; more personalised care, stronger

partnerships between stakeholders (providers, service users, families) and aligning funding along the lines of disability services where service users have an element of choice of providers.

Funding follows the service, not the individual. While packages of care aim to meet individual needs, the funding is tagged to the service. There is not a great deal of movement of funds between services. Either contracts with existing service providers are rolled over with modest changes in service specifications or blueprint money is reprioritised to fund evidence-based service innovations.

What are the options for a restructured model to improve mental health outcomes?

Cohesion and integration in the Aotearoa New Zealand system are longstanding challenges for the health system. While many areas manage to get a broad range of stakeholders involved in developing strategies and planning frameworks, it is harder to create funding models that allow them to work together.

There is also the question as to which level of operation a restructured system and reorganised funding, provision and payment arrangements should be applied. While reforms tend to be system wide, they can be more pronounced at certain levels. Further, reforms at each level impact on the other levels:

Macro level: An entire reorganisation of the health system or mental health system towards a certain way of behaving. This is generally best done over the long term. For example since the 1990s Australia has deliberately set out to shift the focus away from secondary services to community-based services. This has included an increased focus on e-therapy, delivery of psychological therapies, ongoing awareness raising and health promotion programmes, and reorientation of services to prevention and community-based ones and away from inpatient secondary settings. As a result beds in public psychiatric hospitals fell from 0.8 beds per 1000 to 0.1 per 1000 between 1992 and 2002.

Meso level: Wider social sector: whānau ora to put planning in the hands of whānau. Health system alliancing – at broad level co-planning and in some cases pooling of funding between service providers, a type of commissioning where general practices or PHOs hold budgets and commission services for populations. WHO and WONCA (2008) recommend integrating mental health care into primary care is an essential part of this level of intervention.

Micro level: There is also the question of choice and agency for people who use mental health services, particularly specialist services. Te Pou (Te Pou o Te Whakaaro Nui 2014) concluded that a purchasing model where individuals could select services according to their needs and preferences had merit, however, would require good support services to ensure people purchased

comprehensive services and could navigate their way through a very different way of dealing with service providers. Indeed there already exist micro level services in primary care for those with mild to moderate mental illness who access packages of care, or for those who have other chronic illnesses that are managed alongside mental illness.

It should be noted that Aotearoa New Zealand is in the throes of mini-reforms: The move towards integrated care, health care homes and movement of some secondary services into community settings is already underway. Any mental health system reform should link into these reforms and make the most of what learning and gains they can offer.

Moreover a “major” review of the health system was launched in May 2018, with a focus on improving outcomes, equity, and primary and community based care (D. Clark 2018)

Shifting the workforce to better provide for mental health and addiction care needs

Health systems can only function with health workers, and so the availability, accessibility, acceptability and quality of the health workforce are all required for effective services.

The current mental health and addictions workforce is primarily a mental health workforce, with only 16% of the workforce having an addictions focus (see Figure 6.1 below). Two thirds of the workforce are based in DHBs, while a third are in NGO providers. The largest provider group is support workers, with only 6% of the workforce being medical and other professionals (See Figure 6.1 below).

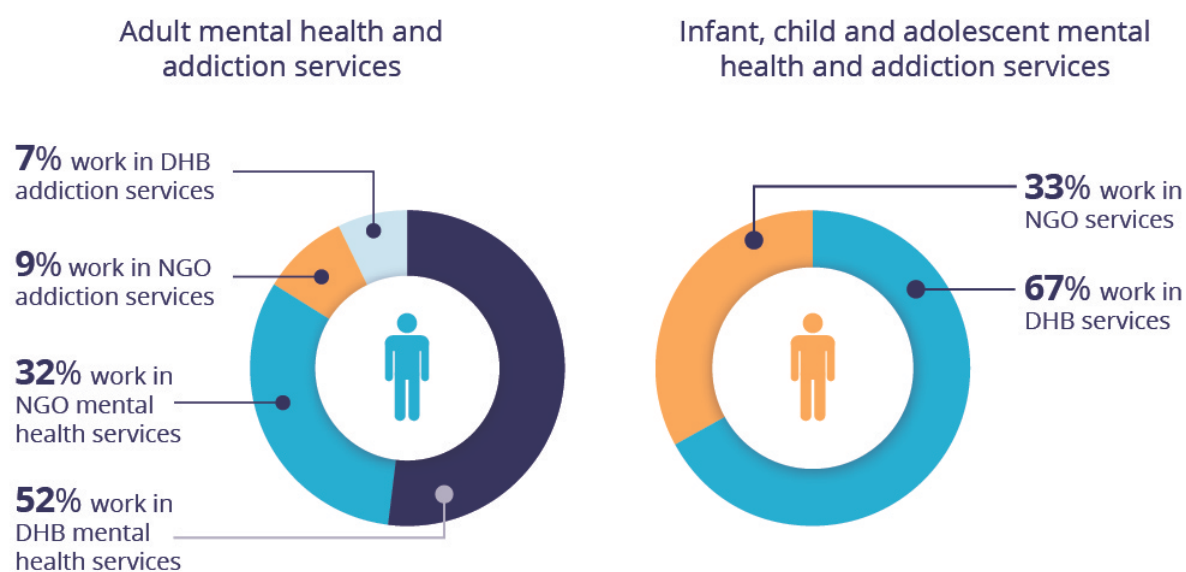


Figure 6.1 the percentage of FTE positions across DHB and NGO services (source: (Ministry of Health 2017d)

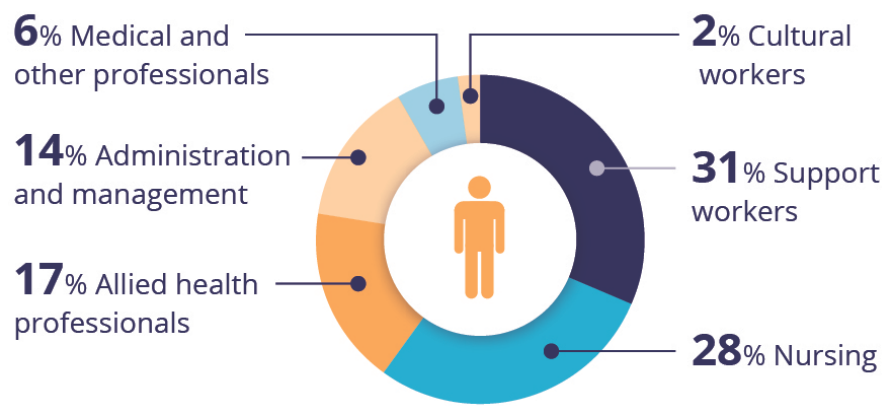


Figure 6.2 the percentage of each professional group working in Vote Health funded adult mental health and addictions services 2014 (source: (Ministry of Health 2017d))

The 2011 review of mental health and addiction workforce identified the need for a large overall increase in the mental health and addictions response of the sector, and a shift in emphasis, building on the gains of services for people with high and complex mental health needs to better provide for early intervention, primary and community care and the needs of the elderly (Mental Health and Addiction Service Workforce Review Working Group 2011).

The review recommended increased capacity for lower intensity care, including primary based mental health and addictions packages of care (brief interventions, talking therapies), supported self-care with whānau and family support (including health promotion, e-therapies, whānau and peer support), and increased capacity in the general primary care workforce (Mental Health and Addiction Service Workforce Review Working Group 2011). This is in recognition of the fact the highly specialised psychiatrist and psychologist workforce is small and could never be expected to meet the demand for mental health and addictions services. This could be care provided by peers, social workers, kai awhina and others in the existing system.

In the UK the approach taken to increasing the workforce for talking therapies has been the training of large new workforce of Psychological Wellbeing Practitioners (PWP) to provide high volume, low intensity, CBT-based interventions (<https://www.england.nhs.uk/mental-health/adults/iapt/workforce/>).

The Mental health and addiction workforce Action Plan 2017-2021 identifies priority areas and actions to improve workforce integration and upskill and diversify the workforce (See Table below). However New Zealand has not moved towards training a large workforce to provide publicly funded low intensity psychological interventions (in the way that the U.K and others have done).

Mental Health and Addiction Workforce Action Plan 2017–2021			
Four priority areas			
1 A workforce that is focused on people and improved outcomes	2 A workforce that is integrated and connected across the continuum	3 A workforce that is competent and capable	4 A workforce that is the right size and skill mix
Fourteen actions			
1.1 Implement an outcomes approach by commissioning workforce development in line with the New Zealand Health Strategy and national frameworks. 1.2 Develop strong leadership programmes and pathways at all levels to support the changing environment. 1.3 Use data gathered to revise and adapt the workforce development infrastructure (national, regional and local) to ensure expected outcomes are being met.	2.1 Enable a more mobile, responsive workforce that can adapt to new models of care. 2.2 Strengthen collaborative ways of working to deliver coordinated and integrated responses. 2.3 Facilitate health and other agencies to share information, knowledge and resources they can use to address the social determinants of health.	3.1 Build capability across the health workforce to respond to mental health, addiction and physical health issues. 3.2 Support the development of the primary and community workforce to respond effectively and facilitate access to appropriate responses. 3.3 Strengthen and sustain the capability and competence of the mental health and addiction workforce. 3.4 Strengthen the workforce's capability to work in multidisciplinary ways.	4.1 Use workforce data to understand the current and future size and skill mix of the workforce. 4.2 Grow and develop the Māori workforce. 4.3 Develop recruitment and retention strategies to address shortages and grow the Pacific, peer and consumer workforces. 4.4 Develop mental health and addiction career pathways both for those already working in health and social services and for new recruits.

Source: (Ministry of Health 2017d)

Diversity in the workforce is another key factor. Māori and Pacific and other ethnic minority groups remain under represented in the workforce, particularly at the more highly trained and professional levels. While initiatives are underway to address this (such as the *Futures that Work* and *Le Tautua* programmes to enhance Pacific entry into and leadership of the mental health sector (Faleafa and Pulotu-Endemann 2016)), such work needs to continue to be supported and the diversity of our workforce needs to be monitored as a key indicator of success.

6.4 Mental health data and research

Relevant, accurate and timely information is critical to improving mental health and wellbeing in Aotearoa New Zealand. This section covers the data environment currently and what information would be needed to both understand the wellbeing of the population and the burden of mental illness and addictions, and monitor and evaluate how effective any interventions are. It discusses:

- what we might want to measure and how we might want to measure it;
- what we are currently measuring in Aotearoa New Zealand, and where there are gaps; and
- the role of research and evaluation in turning data into useful information.

6.4.1 Overseas strategies for improving mental health data and research

This chapter makes reference to overseas recommendations regarding mental health data and research, where they are relevant to the Aotearoa New Zealand context.

Expanding and improving the collection of mental health data is a common feature in overseas recommendations for improving mental health. This includes data on prevalence, outcomes, service use and pathways, workforce capacity, government spending, lived experience of mental health, and data on measures of importance to indigenous populations.

Most overseas strategies recommend collecting data on key indicators in order to monitor progress against recommendations and targets. WHO's Global Target 4 states that "80% of countries should be routinely collecting and reporting at least a core set of mental health indicators every two years through their national health and social information systems" by 2020 (World Health Organisation 2013). Australia has established an annual reporting process for reporting performance against a set of 24 key indicators, including prevalence estimates, measures of physical health, employment rates and adequate housing in people living with mental illness, and rates of seclusion and involuntary treatment (Department of Health 2017). Scotland plans to develop a quality indicator profile in mental health which will include measures across six quality dimensions: person-centred; safe; effective; efficient; equitable; and timely (Healthier Scotland 2017). Canada has developed a set of six performance indicators that will be used to monitor progress against their mental health strategies and goals, including prevalence estimates, measures of physical health and mortality, and physician follow-up rates (Jones et al. 2015).

Beyond measuring progress against current targets, most overseas strategies also recommend wider changes to the mental health data environment, including:

- better data linkage across government sectors (Mental Health Taskforce 2016; Department of Health 2017);
- improving the collection of routine data (European Union 2016);
- developing a national mental health dataset (Department of Health 2017; Mental Health Commission of Canada 2016);
- expanding the range of measures collected. For example the United Kingdom (Mental Health Taskforce 2016) recommends that “information gathered should reflect social as well as clinical outcomes – e.g. education, employment and housing - that matter to people with mental health problems”; and
- involving consumers and carers in the development of new data collections and ensuring that data are available about individuals’ lived experiences of mental health (Mental Health Commission of Canada 2016).

Improving mental health research and evaluating mental health programmes is also a key feature of many overseas mental health and addiction strategies.

Both the UK and Australia (Mental Health Taskforce 2016; Department of Health 2017) recommend the development of a national mental health research strategy, while the WHO recommends that mental health be explicitly included in general and priority health policies, plans and research agenda (World Health Organisation 2013).

Interdisciplinary and cross-sectoral research are emphasised, particularly in the Canadian and UK strategies. Links between researchers and government agencies are a particular focus, with Australia suggesting placing “researchers in residence” within mental health services, and favouring research driven by the needs of policy makers, services, clinical professionals, consumers and carers. The Canadian strategy suggests “a coordinated approach to mental health research among researchers, organizations, and agencies”. The WHO recommends that special attention be paid to “operational research with direct relevance to service development and implementation” (World Health Organisation 2013).

6.4.2 The purpose of mental health data

Mental health data has a range of purposes, including:

- Monitoring progress against goals. Without regular reporting on mental health and services, we cannot know if things are changing.
- Monitoring changes over time in the prevalence and patterns of disease and distress. Good quality mental health data will allow us to track changes over time in the prevalence of

mental health problems, both for the population as a whole, and by age, sex and ethnicity, and any groups of special interest.

- Quality evaluation. Information about individuals' service use and outcomes can help us to understand whether mental health services are meeting the needs of mental health consumers. Without good data we cannot determine whether interventions or system changes are improving outcomes.
- Guiding the allocation of resources. Data can be used to identify areas or groups of higher need, and target funding and resources towards those areas. It can also be used for forecasting and planning future service demand.

6.4.3 What do we need to measure?

A good mental health data system would collect a range of information relevant to mental health. To be most useful, the data should:

- be standardised so that information can be compared across different regions, providers and levels of service;
- if being collected as part of routine service provision, should be easy to collect so that it does not place undue pressure on clinicians and other service providers;
- include standard identifiers (eg NHI number) to allow it to be linked to data in other parts of the health system;
- include measures that are meaningful to mental health consumers and represent their experience of the mental health system and their perspective on their own outcomes;
- take a broad view of outcomes, including those that are outside the mental health system, such as physical health, housing, and employment; and
- include measures that are relevant and meaningful for Māori, developed in consultation with Māori researchers, clinicians and consumers.

Some of this will be collected routinely as part of the operation of the health system. Additional data may be collected from surveys. It is most useful for reporting and research if key measures are drawn together into a national core mental health dataset, in line with the WHO and other overseas recommendations.

Using social media and other 'big data' (eg Google Trends) to understand both the population level patterns of mental health and substance use (i.e. for surveillance) and the risk and warning signs for individuals, is an area of increasing interest (Conway and Connor 2016). However, this area is still in

development and in the immediate future it is likely that most of Aotearoa New Zealand's data needs will be met from traditional survey and routine data sources.

A good mental health system will be supported by data collection across a range of measures including:

Incidence and prevalence

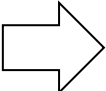
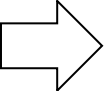
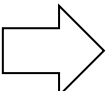
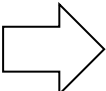
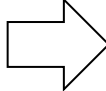
This includes the incidence and prevalence of diagnosed mental illness, substance use, distress, suicide, and self-harm. Incidence and prevalence estimates should be available by age, sex and ethnicity, at a minimum. Incidence and prevalence information is important for monitoring how the burden of mental illness is changing over time, and to identify and respond to changing needs. Prevalence is best measured through surveys that represent the whole Aotearoa New Zealand population, rather than through administrative datasets that capture only a subset of the population (such as mental health service users).

Wellbeing

In addition to measures of mental distress, there is a need for measures of wellbeing, both in the general population and amongst mental health consumers. Wellbeing is a complex concept that includes (but is not limited to) connectedness, belonging, and living a meaningful life. Wellbeing is not just the absence of distress: individuals can experience mental distress and also experience satisfaction with their lives and a sense of wellbeing. This information is important for understanding how well we are supporting people to live satisfying and meaningful lives (Kvalsvig 2018).

Recording wellness measures in routine data collections (e.g. as part of mental health consultation or treatment sessions) would provide information about wellness within the mental health service population. Wellness in the general population is best measured through nationally representative surveys.

Figure 8. Health Promotion Agency principles for measuring wellbeing (Health Promotion Agency 2018)

Wellbeing is...	Principles for measurement	
Multiple connected dimensions		Identify and measure multiple dimensions; assess connectedness between dimensions; avoid single measures.
Contextual and is culturally defined		Use culturally appropriate measures; narrative accounts may work better.
A positive concept		Avoid using measures of psychological distress to assess wellbeing.
What people intrinsically value		Use participants' own definitions of wellbeing to identify the best measure.
Relational		Choose measures that capture relationships rather than states.

Wellbeing promotion is informed both by quantitative and qualitative measures

Service use

Use of current services and support, at all levels of the health system from inpatient and specialist mental health care through to primary care. This information is important for service planning, and, combined with information about prevalence, can help us measure unmet need. Information about service use should be collected routinely by service providers.

Service quality and performance

Relevant, accurate and timely performance information is critical for improving performance of health systems. As Kilbourne et al (2018) note (with reference to the US): the “persistent gap in quality of mental health care is due in part to lack of systematic methods for measuring quality”. Information about service performance can help us to understand how well our services align with best practice and how well they are meeting the needs of mental health consumers. Evaluation of

new programmes and services should be standard and the results of these evaluations can contribute back to the evidence pool about what works and what doesn't.

At a minimum, services should be recording pre- and post-service outcomes for each person. Outcomes should not be limited to mental health measures but should include wider measures of function and wellness, including physical health, housing, family and employment.

It is critical that some of these measures are relevant to mental health consumers and reflect consumers' views about their experience of the service and their own outcomes. The UK (NHS England 2016) summarises this in stating that there is a "need for a leading role for people with lived experience (and their families) in assuring that services are assessed based on quality and the outcomes that are valued by the people who use them".

As with all other data collection, quality and outcome measures in Aotearoa New Zealand should include measures of importance to Māori.

As an example, the UK (NHS England 2016) has developed a framework approach for quality and outcomes measures in order to better measure mental health service performance. It suggests that outcome measures should align with three pillars of quality: clinical effectiveness, patient safety and experience, and that consumers' reports of their own outcomes should be collected alongside clinician reports of outcomes. They state that quality measures should be:

- clinically relevant, so that they are seen to add value for clinicians as a routine part of their clinical practice and continuous quality improvement;
- reflect what people who use the service (and their families) want;
- culturally appropriate and culturally reliable;
- aligned with system-wide objectives; and
- measurable using metrics with established reliability and validity.

Information about the current and future size and skill mix of the mental health workforce is another key area for data collection. Two of the fourteen actions in Aotearoa New Zealand's mental health and addiction workforce plan (Ministry of Health 2017d) focus on using data to understand the current and future size and skill mix of the workforce, and to revise and adapt the workforce development infrastructure to ensure expected outcomes are being met.

6.4.4 What are we currently measuring in Aotearoa New Zealand?

This section provides an introduction to the mental health data currently collected in Aotearoa New Zealand. A more detailed stocktake of mental health data and a discussion of gaps will be provided alongside the analytical work in the next phase of work for the inquiry.

Incidence and prevalence

Aotearoa New Zealand has few data collections that were designed specifically for the purpose of estimating prevalence or incidence of mental health problems (with Te Rau Hinengaro being the main exception). However, many collections contain measures of mental health distress or service use, alongside demographic information such as age, sex and ethnicity, which can be used to construct proxies of prevalence or incidence. As the collections were not designed to measure prevalence or incidence, estimates derived from these datasets are of variable quality.

Suicide and self-harm

Suicide incidence estimates are derived from the Mortality Collection, which contains cause of death information for all registered deaths in Aotearoa New Zealand. This information is used to create suicide incidence estimates by age, sex, ethnicity and DHB region that are released annually by the Ministry of Health. These estimates are comprehensive and of high quality. Provisional suicide numbers are also reported by the Chief Coroner, but these rates include all possible suicides reported to the Coroner (rather than the outcomes of the coronial process) and so overestimate the number of suicides.

Self-harm and other non-fatal suicidal behaviour are more difficult to estimate. The NMDS (National Minimum Dataset) contains information about emergency department and hospital admissions for self-harm, and can be used to estimate the prevalence of these events (add footnote- complete ED from 2012 onwards). However, this misses suicidal behaviour that is less medically serious and is treated in primary care. This information may be held in primary data collections at various PHOs, but it is fragmented and of variable quality, and it is not clear if it could feasibly be used to construct prevalence estimates.

Mental health diagnosis

Good quality national prevalence estimates can be derived from Te Rau Hinengaro: The New Zealand Mental Health Survey (Oakley Browne, Wells, and Scott 2006a). This was a nationally representative survey of 12,992 people designed to estimate the one-month, 12-month and lifetime prevalence rates of major mental disorders, using a clinical interview (CIDI 3.0). Prevalence rates are available for people aged 16 and older by a number of sociodemographic variables. While the prevalence

estimates from this survey are considered high quality, it was run in 2003 and late 2004 and the prevalence estimates are now out-of-date.

Aotearoa New Zealand also has some more recent surveys that can be used to estimate prevalence of specific diagnoses by various demographic and geographic breakdowns. Both the New Zealand Health Survey (NZHS) and the New Zealand Mental Health Monitor (NZMHM) can be used to estimate the prevalence of anxiety and depression in adults. In addition the NZHS data can also be used to estimate prevalence of emotional, hyperactivity and behavioural symptoms in children. These surveys use screening tools¹⁰ used by clinicians to give provisional diagnoses. The NZHS also asks about diagnosed conditions. Survey estimates of prevalence are also seen to be low due to the retrospective nature of the questions.

Administrative data collections hold information about mental health and have also been used to derive prevalence estimates. The NMDS, PRIMHD (Programme for the Integration of Mental Health Data), the Pharmaceutical Collection and Ministry of Social Development (MSD) benefit data contain information about different aspects of mental health service use. PRIMHD contains information on specialist services provided within inpatient and community settings. NMDS also contains inpatient data and only slightly improves overall prevalence estimates but improves estimates for severe mental health conditions, with more hospitalisation, because diagnosis data is of better quality than that in PRIMHD. The Pharmaceutical Collection contains all publicly subsidised community dispensed pharmaceuticals and therefore can be used to identify people with a mental illness who are not being seen by specialist services. Benefits data has coverage of people on the benefit due to mental illness.

A limitation of administrative datasets for estimating prevalence is that they do not capture data on all people with mental health problems. Many people with mild to moderate distress are managed in primary care, and this information cannot currently be included in national prevalence estimates. A number of people with a mental illness do not access services at all, particularly people with addiction. Furthermore, there are known quality problems with the mental health diagnosis information in both NMDS and PRIMHD. Attempts have been made to use the Pharmaceutical Collection to increase coverage, but pharmaceutical dispensing is not an adequate proxy for diagnostic information.

Aotearoa New Zealand's two long-running longitudinal studies, the Dunedin Multidisciplinary Health and Development Study and the Christchurch Health and Development Study, have been used to

¹⁰ PHQ-Somatic, Anxiety, Depressive Symptoms, Strengths and Difficulties Questionnaire, Patient Health Questionnaire (PHQ-9), Generalized anxiety disorder (GAD-7).

estimate prevalence. Although the samples are small, the detailed longitudinal data collected within these studies is richer than in any other Aotearoa New Zealand collection. However, the small sample sizes mean that these collections are best suited to estimating prevalence and incidence of the more common disorders, such as depression, anxiety, and substance abuse. Prevalence estimates derived from these longitudinal studies are generally higher than estimates derived from surveys due to differences in tools used and the prospective data collection in the longitudinal studies (vs retrospective in surveys) (Moffitt et al. 2010). Furthermore, as the longitudinal studies are birth cohorts the prevalence and incidence rates apply only to similar aged cohorts. For example, estimates for childhood disorders apply to individuals who were children in the 1980s, and are not likely to generalize to current cohorts of children. The newer Growing up in New Zealand study will be useful for updating these estimates.

The New Zealand Health Survey collects information on psychological distress, using the Kessler Psychological Distress Scale (K-10). The New Zealand Health Survey also contains data on hazardous drinking and risky substance use collected using AUDIT and ASSIST. Each of these can be used to estimate prevalence but, as above, the same caveats about the use of screening tools for prevalence apply.

Service use

Aotearoa New Zealand has detailed data on mental health specialist service use (secondary and tertiary health services) but incomplete data on mental health services provided in primary care. These collections are described below.

Specialist service use

Aotearoa New Zealand's main mental health and addiction dataset is PRIMHD. PRIMHD contains information on specialist mental health and addiction services provided within inpatient and community settings. All district health boards (DHBs) and non-governmental organisations (NGOs) that provide mental health services, submit data to PRIMHD. Data is available on: the type of treatment received, demographic information, referral pathways, outcomes, diagnosis and legal status data. Although PRIMHD contains comprehensive information, it is important to note that there are some gaps: NGO data is incomplete before mid-2012 and data on older people is incomplete within southern and central regions.

Further specialist service use data is available within other Ministry of Health collections. The NMDS is a national collection of public and private hospital discharge information, including coded clinical data for inpatients and day patients. NMDS holds mental health and addiction data on: inpatient stays at mental health facilities; discharges that contain mental health or self-harm diagnoses; and alcohol or drug related hospitalisations. Although both PRIMHD and NMDS hold inpatient data and

diagnosis data, NMDS data has more detailed information about the inpatient event itself and diagnoses are coded formally by specialist clinical coders (although it is not known whether these mental health diagnoses are recorded accurately during general hospital visits). The National Non-Admitted Patient (NNPAC) collection some limited outpatient mental health and addiction information but generally is not used for research purposes because it contains no further detail to that in PRIMHD. Likewise the Contract Management System (CMS) and the Clients Claims Processing System (CCPS) are collections that are not used for research but have been included because they contain important financial information about mental health service use.

Primary health service use

A considerable amount of mental health care in Aotearoa New Zealand is provided by GPs and other primary health care providers, but this information is not easily accessible. Aotearoa New Zealand has no national collection for primary care data. Some information is held by PHOs, but the quality and coverage of data varies, and it is not drawn together into a single dataset. Some Primary Health Organisations (PHOs) hold detailed datasets, containing personal identifiers, but only for one region, for example ProCare owns detailed data for Auckland. The ProCare dataset is currently available for limited use in the IDI. The national Primary Health Organisation Enrolment, and the new National Enrolment Eligibility collection, is also at person level but it does not contain detail about the treatment provided.

Some information about primary mental healthcare service use is available from surveys. The NZHS mental health and substance use module asks whether respondents received GP treatment in the previous 12 months for concerns about their emotions, stress, mental health or substance use. This information is of high value but has only recently been made available for analysis purposes. The longitudinal studies hold data on primary mental healthcare, for example the Christchurch Health and Development Study collect information on mental healthcare treatment received by the general practitioner and the nature of the treatment received. Once again this information is of good quality and could theoretically be analysed with any of the comprehensive information collected as part of these studies. However, data from these studies is not linked to other collections and is not widely available for use. Te Rau Hinengaro also contains information about mental health service use, but as mentioned previously these estimates are now out of date.

Service performance

This section covers how well our services are supporting people, including access barriers, system effectiveness and workforce capacity. As with service use, most of the information available focuses on specialist mental health treatment with some information on wider system performance available within the longitudinal studies and a number of surveys.

Effectiveness

We are not aware of any data on the effectiveness of primary mental healthcare performance (other than what can be gleaned from the barriers to access information below). This section focuses on the system performance of specialist services.

The performance of the mental health and addiction sector is measured by a set of population performance measures and Key Performance Indicators specified by the Ministry of Health to reflect government priorities. Data for these is mostly sourced from PRIMHD. The current measures include:

- Improving the health status of people with severe mental illness through improved access;
- Improving mental health services using relapse prevention planning;
- Shorter waits for non-urgent mental health and addiction services; and
- Reduce the rate of Māori under the Mental Health Act.

In addition to the Ministry's population performance measures, specialist service performance is assessed through the **New Zealand Mental Health Key Performance Indicator (KPI) Benchmarking Framework**. These indicators were developed as part of extensive sector consultation and managed by the Northern Regional Alliance. There are numerous adult and child indicators that are available according to different demographic and geographic factors. The majority of the indicator data is also extracted from PRIMHD. One of these indicators went through thorough evaluation as part of the recent Office of the Auditor General's audit of the effectiveness of the planning to discharge people from hospital (Office of the Auditor-General 2017).

Social outcomes data is also collected and can theoretically be summarised to assess system performance, at a mental health team, DHB and national level. Information about both the outcome of specialist service use and social outcome indicators for specialist service users is collected in PRIMHD.

Social outcome indicators, also known as Supplementary Consumer Records, have also been collected from mid-2016 onwards alongside PRIMHD. These include whether someone has a wellness plan, accommodation, employment status and education and training status. At the current time little is known about the quality or coverage of this data.

Workforce capacity

Workforce capacity is a key component of mental health service performance. Several data sources hold information about Aotearoa New Zealand's specialist mental health and addiction workforce.

The key dataset is called Health Workforce Information Programme and is owned by Central TAS. Information is collected by DHB payroll systems and available at an employee level but generally disseminated in a summarised form. Data is available by demographic and geographic breakdowns as well as length of service and FTE turnover.

There is currently no equivalent dataset available for NGOs, a large part of the specialist mental health and addiction workforce. The most up-to-date information available about the adult NGO workforce is available in the Adult Mental Health and Addiction Workforce: 2014 Survey of Vote Health Funded Services. Workforce information is also available for Child and Youth specialist services from the Workforce Stocktake of Infant, Child and Adolescent Services (2012). This stocktake was conducted by the Werry centre and represents 99% of child and youth services.

There are many other smaller workforce surveys and data collections, including the 2007 NgOIT Workforce Survey (Platform Inc., n.d.), The Mental Health and Addiction Services for Older People: Workforce Survey (Te Pou o Te Whakaaro Nui 2011); the Addiction Services: Workforce and Service Demand Survey (Matua Raki 2011); the Medical Workforce Survey (Medical Council of New Zealand 2015). For more detail, Te Pou o te Whakaaro Nui's 2017 report on the DHB workforce (Te Pou o te Whakaaro Nui 2017) contains an analysis of recent data and a discussion about important information for the purposes of national workforce planning.

Barriers to access

Information about peoples' barriers to accessing mental health care can tell us something about service performance. This information has been collected in some surveys, including Te Rau Hinengaro, the Christchurch and Dunedin longitudinal studies, and the New Zealand Health Survey mental health and substance use module.

Wellbeing

There is no standard, universally accepted way to measure wellbeing. In a recent international review of wellbeing measures (Linton, Dieppe, and Medina-Lara 2016), the authors identified 99 wellbeing measures in the peer-reviewed literature but did not recommend any specific instrument. However, they did identify a set of themes in wellbeing measurement: mental wellbeing, social wellbeing, activities and functioning, physical wellbeing, spiritual wellbeing, and personal circumstances. The themes thus include the four 'sides' of the house in Te Whare Tapa Whā model, suggesting that there are some commonalities between cultures in identifying meaningful indicators of wellbeing.

Limited information is collected about a person's wellbeing as part of PRIMHD and NMDS reporting. For example, information is collected at admission and discharge using the Health of the National

Outcome Scale (HoNOS) suite of measures and the ADOM (Alcohol and Drug Outcomes Measure). The change between two collection occasions is considered the outcome. Despite best attempts, the quality of HoNOS data never improved enough to be analysed meaningfully at a national level but data quality may be good enough for specific purposes.

The General Social Survey administered by Statistics New Zealand provides wellbeing information for a nationally representative survey of people aged 15 and over (Statistics New Zealand 2018a). It collects information on a range of measures including culture and identity, standard of living, social connectedness, self-rated health, and civic and human rights.

Te Kupenga (Statistics New Zealand, 2017) was carried out in 2013 and measures four areas of Māori cultural wellbeing: wairuatanga (spirituality); tikanga (customs and practices); te reo Māori (language); and whanaungatanga (social connectedness).

The Health Promotion Agency collects wellbeing information for a nationally representative sample of adults via the Mental Health Monitor and the Health and Lifestyles Survey. The surveys measure life satisfaction, connectedness (including cultural connectedness) and social isolation, and participants' perceptions of whether the things they did were worthwhile. HPA is developing a framework for defining and promoting wellbeing, and is currently conducting further work to identify population indicators of wellbeing for use in its monitors and evaluation studies (Kvalsvig 2018).

6.4.5 Turning data into information: The role of research and analysis

The collection of mental health data provides a base for understanding and improving our mental health system, but data alone is not enough. Data cannot speak for itself - work is needed to turn data into useful, policy relevant information. This is the role of research, analysis and evaluation.

Data linkage

Data linkage can improve the coverage and quality of mental health data and expand the range of questions it can answer. Considerable work has been undertaken in Aotearoa New Zealand to link data together. All health datasets can be linked together using NHI numbers. However, the most prominent example of data linkage in Aotearoa New Zealand is Statistics New Zealand's Integrated Data Infrastructure (IDI), which links together government and NGO administrative and survey datasets. This linking allows us to connect information about an individual across different data collections. The linked data is protected by a range of security and confidentiality protocols that minimise the risk of privacy breaches (Statistics New Zealand 2018b). The IDI currently contains a range of information relevant to mental health, including PRIMHD data, NMDS, pharmaceutical, social housing, benefits and others. Limited primary care data has been uploaded, but at present the use of this data is restricted to one project only. This linkage project is world leading and is in

contrast to other countries such as Australia and the UK who have prioritised data linkage but are only just beginning to undertake it (Mental Health Taskforce 2016; Department of Health 2017). However, linked data does come with limitations. The large size and unstructured nature of the dataset mean that researchers require more advanced quantitative skills to understand and make use of the data. Careful thought needs to be given to understanding the coverage and quality of data in IDI, and guidelines are required to help researchers and policymakers understand which data are fit for purpose and which are not.

Research

Mental Health research in Aotearoa New Zealand is currently fragmented. It is undertaken by a range of organisations including universities, government agencies, service providers, NGOs, and private organisations.

A range of factors that influence the quantity and quality of mental health research include:

- **Strategic direction.** Aotearoa New Zealand currently has no mental health research strategy. Other countries such as Australia and the UK are prioritising the development of mental health research strategies.
- **Workforce capacity.** There is a need for researchers with a range of skills including: understanding the scientific and social issues around mental health; understanding Kaupapa Māori and Pacific peoples' approaches to mental health; understanding the perspectives of those with lived experience of mental distress; quantitative skills to make use of new, large or linked data sources; and knowledge of mental health services in Aotearoa New Zealand.
- **Funding.** There is currently no dedicated funding for mental health research in Aotearoa New Zealand.
- **Policy relevance.** In an environment with limited funding and capacity, it is critical that research addresses questions that are relevant to policy. A mental health research strategy can go some way towards achieving this. In addition, it is important that researchers are well connected with service providers and other parts of the mental health system. Australia has suggested placing 'researchers in residence' within all parts of the mental health system to increase connection between research and service provision (Department of Health 2017).

Another approach to sustainable and policy relevant mental health research is the development of an academic national policy unit. In 2017 the Department of Health in England established the Mental Health Policy Research Unit (MHPRU) at University of London (UCL) and Kings College London (KCL) under the umbrella of the National Institute for Health Research (NIHR).

“Our aim is to help the Department of Health and others involved in making nationwide plans for mental health services to make decisions based on good evidence. We make expert views and evidence available to policymakers in a timely way and carry out research that is directly useful for policy. The MHPRU is managed by academics at UCL and KCL in partnership with collaborators from City and Middlesex University. Our partners include the Centre for Mental Health and the Mental Elf Service. Service users will be part of the research team.”

<http://www.ucl.ac.uk/psychiatry/research/mental-health-policy-research-unit>

6.5 Taking a public health approach to mental health and addictions

In Chapter 3 four key concepts of a public health approach to mental health and addictions were identified:

- The inclusion of promotion and prevention activities
- The collective nature of these activities
- The health of the whole population as a goal
- Addressing inequalities in mental health and addictions

And actions on the broad social determinants were identified as key to prevention, including action on the socioeconomic political context, the hierarchies of power, access to resources, as well as supports to improve the wellbeing of those who are experiencing mental distress.

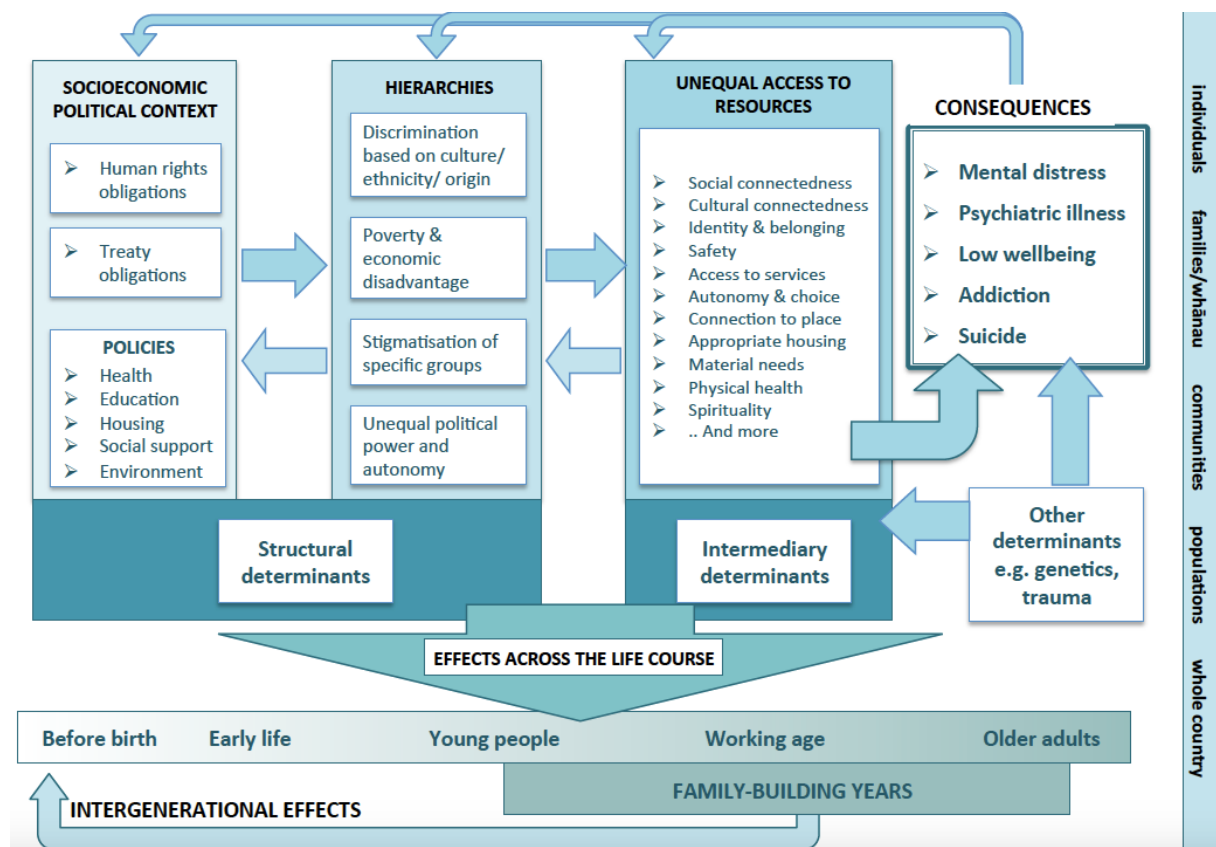


Figure 6.3

In order to act on the broad determinants we need to find ways to work across sectors towards common goals. This section outlines such approaches.

6.5.1 A mental health/wellbeing in all policies approach

‘Health in All Policies’ is about promoting healthy public policy. It is an approach which aims to “improve the health of the population through increasing the positive impacts of policy initiatives

across all sectors of government and at the same time contributing to the achievement of other sectors' core goals" (Department of Health South Australia 2011).

This approach recognises that most of the determinants of health, and particularly mental health, fall outside the control of the health sector.

In Aotearoa New Zealand a Health Impact Assessment (HIA) and more latterly a Health in all Policies approach has gained some traction at local government level, particularly in Canterbury. The Canterbury Health in All Policies Partnership (CHIAPP) (originally the Health Impact Assessment Partnership) between the DHB, a large PHO, and local and regional councils has been operating since 2009. A Health in all Policies approach was used very successfully in response to the earthquakes of 2011 and the partnership continues to be strong (Stevenson, Humphrey, and Brinsdon 2014). However the approach has not been embedded at national level: a Health Impact Assessment Unit was established within the Ministry of Health in 2009 but has not survived subsequent restructures of the Ministry.

Where the benefits of HIAP are framed as principally health benefits, the health in all policies approaches can be fragile, and framing benefits beyond health attainment is strongly advised (Lancet 2017).

A focus on improving wellbeing is arguably of broader appeal across sectors. Mental health in all policies approaches aim to promote population mental health and wellbeing by initiating and facilitating action within different non-health public policy areas. The European Commission Framework for Action on Mental Health and Wellbeing (https://ec.europa.eu/health/mental-health/framework_for_action_en) includes mental health in all policies as a priority area and the incorporating of mental health into policies at all levels as a specific action.

Examples of good practice

The Norwegian Public Health Act 2012 requires each local municipality to promote the population's health and wellbeing and implement measures to meet their local public health challenges, including acting on the determinants of health in their planning processes. This has come alongside a political commitment to incorporate mental health into public health activities on an equal footing with other components of public health. Initial priorities have included promoting drug and alcohol prevention work and development and dissemination of measures to strengthen young people's coping and use of their own resources. From: https://www.sm.eg/sites/default/files/content-editors/eesmargid_ja_tegevused/Norra_toetused/Rahvatervise_programm/the_norwegian_public_health_act.pdf

In England **No health without mental health** is a cross government mental health outcomes strategy (HMG 2011). The specific actions of the strategy are listed below.

Specific Actions No Health Without Mental Health (2011):

- ensure that mental health is high on the Government's agenda;
- make mental health a key priority for Public Health England;
- agree and use a new national measure of wellbeing;
- prioritise early intervention across all ages;
- take a life course approach, with objectives to improve outcomes for people of all ages;
- tackle health inequalities;
- challenge stigma;
- invest around £400 million over four years to make a choice of psychological therapies available;
- ensure that by 2014 people in contact with the criminal justice system will have improved access to mental health services;
- commit funding from the Department of Health to ensure the best treatment possible for Service and ex-Service personnel;
- identify non-legislative solutions to tackle low levels of body confidence;
- launch a set of 'recovery' pilots to support the recovery of those using mental health services;
- publish a series of reviews of evidence on improving public mental health;
- review the models of service and practice for both health visiting and school nursing;
- work with the royal College of General Practitioners and the royal College of Psychiatrists to agree advice and support for GP consortia to commission effective mental health services that are accessible to all, including the most disadvantaged and excluded;
- ensure that close working between the Department of Health and the Department for Work and Pensions supports mental health service providers to help people to enter into and return to work;
- publish a new cross-government suicide prevention strategy this year.

WHO Healthy Cities is a global movement working to put health high on the social, economic and political agenda of city governments. The WHO European Healthy Cities Network includes 100 flagship cities and approximately 30 national networks. Their shared goal is to engage local governments in political commitment, institutional change, capacity-building, partnership-based planning and innovation. <http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/who-european-healthy-cities-network>

I-CIRCLE is a ground-breaking initiative, supported by the International Initiative for Mental Health Leadership (IIMHL) that involves cities and urban regions within eight countries working together to problem-solve and spread innovations. The purpose of this collaborative work is to support mental health and wellbeing within urban settings and enable citizens to thrive.

The idea was conceived when Dr Arthur Evans, Philadelphia's Commissioner of Behavioural Health and Disability Services, presented at the IIMHL Leadership Exchange in Vancouver in September 2015. Dr Evans spoke about the City of Philadelphia's ten years of work with its communities and city government prompted by the recognition that the major issues for our urban communities (e.g. homelessness, education, employment, criminal justice) are intertwined with behavioural health issues and that effectively addressing those behavioural health issues actually helps people in other areas of their lives.

Philadelphia took a public health approach and a trauma informed approach and engaged a wide range of people outside the mental health system in order to build resilience and self-determination, recognize and address emerging behavioural health issues and ensure people with behavioural health challenges access needed supports, can work and can be independent and productive members of the community.

I-CIRCLE will bring together leaders from Philadelphia, New York, Vancouver, West Midlands England, some other US, Canadian and English cities, Dublin, Scotland, Stockholm, Sydney and Auckland.
<http://www.iimhl.com/icircle-about-us.html>

Examples of tools

Two New Zealand tools for health impact assessment have been developed: **A Guide to Health Impact Assessment: a policy tool for New Zealand** (Public Health Advisory Committee 2005), and **Whānau Ora Impact Assessment** (Ministry of Health 2007). These tools are specifically developed for the New Zealand context, and provide a robust methodology for understanding the potential health effects of policies before they are implemented, with a focus on equity.

Developed in the United Kingdom, the **Mental Wellbeing Impact Assessment (MWIA)** is a toolkit based on the Health Impact Assessment methodology. Its principal aim is facilitating healthy public policy. With a specific focus on mental wellbeing, MWIA methodology is used to assess whether government, non-government agencies' and private sector's policies, programs, projects and proposals have a negative or positive impact on the population in terms of wellbeing (Cooke et al. 2010). This tool has been used in a wide range of initiatives programmes and services and a 2014 review found that MWIA is successful at orienting initiatives towards supporting the evidenced protective factors for wellbeing in a wide range of sectors (S. King 2014).

The **Health Equity Assessment Tool (HEAT)** (Signal et al. 2008) is designed to help tackle inequalities when making decisions. It consists of ten questions designed to challenge users to think broadly about equity issues.

HEAT Tool questions:

1. What inequalities exist in relation to the health issue under consideration?
2. Who is most advantaged and how?
3. How did the inequalities occur? What are the mechanisms by which the inequalities were created, maintained or increased?
4. Where/how will you intervene to tackle this issue?
5. How will you improve Māori health outcomes and reduce health inequalities experienced by Māori?
6. How could this intervention affect health inequalities?
7. Who will benefit most?
8. What might the unintended consequences be?
9. What will you do to make sure the intervention does reduce inequalities?
10. How will you know if inequalities have been reduced?

6.5.2 Wellbeing and the law – the role of legislation

Legislation has an important place in inter-sectoral actions. A recent WHO report: Advancing the right to health: the vital role of law sets out practical ways in which the law can be used to facilitate inter-sectoral action for health, including through new governance structures and processes for advancing shared goals, an accountability framework, and a clear mandate from the highest levels (Lancet 2017). Legislation can be a way of formalising commitment across government.

The role of legislation in reducing harm from addictions

Legislative mechanisms are also important for reducing harm from substance use, as mentioned in section 3.6.1.

In 2010 the Law Commission released its report *Alcohol in Our Lives: Curbing the Harm*, a report on the review of the regulatory framework for the sale and supply of liquor (Law Commission 2010). This report recommended a number of regulatory measures to reduce alcohol related harm including:

- increasing the price of alcohol through minimum pricing,
- reducing the density of alcohol outlets,

- increasing the purchase age, and
- restricting alcohol advertising and sponsorship.

These strategies are in line with The World Health Organisation Global Strategy on Alcohol and the new WHO resource tool on alcohol taxation and pricing (World Health Organization 2014)(World Health Organization 2017). The current legislation for control of alcohol in New Zealand is the Sale and Supply of Liquor Act 2012 and with the exception of some measures to reduce outlet density through community action, does not include these measures.

A new legislative approach to illicit drugs also has the potential to reduce the harm caused to individuals and to wider society, and internationally there is move towards treating drugs use as a health issue, and the implementation of decriminalisation models of some drugs (for example cannabis in California) or all drugs (for example Portugal's 2001 drug law). In New Zealand a Model Drug Law has been proposed (New Zealand Drug Foundation, 2017).

6.5.3 Mental health and wellbeing in the national and international context

Nationally, New Zealand is moving towards a focus on wellbeing in a number of sectors. For example:

- The Local Government Act 2002 included a statement that its purpose was to “provide for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities (the *4 aspects of well-being*), taking a sustainable development approach.” This provision, repealed in 2012, is currently in the process of being reinstated, by the Local Government (Community Well-being) Amendment Bill which is currently before parliament.
- The Department of Prime Minister and Cabinet includes a Child Wellbeing Unit alongside a Child Poverty Reduction Unit.
- The Treasury have developed a Four Capitals of Intergenerational Wellbeing Framework including natural, human, social and financial and physical capital.

Any move towards a national focus on wellbeing for mental health and addictions will need to work in with these developments.

Internationally, there are many examples of global policy direction which align with a focus on wellbeing. For example:

- The UN Sustainable Development goals (2015) include explicit mention of mental health and addictions within the health goal. Target 3.4 requests that countries: “By 2030, reduce by

one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being.” Target 3.5 requests that countries: “Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use”.

- More broadly, the Sustainable Development Goals target many of the determinants of mental wellbeing including poverty, housing, and child and maternal health

6.5.4 Other international approaches to embedding prevention

A recent report from the Mental Health Policy Commission at the University of Birmingham:

Investing in a Resilient Generation (Burstow et al. 2018) presents an approach to “transformational change to embed prevention in all policies and practices affecting young people”.

Four building blocks for resilient young people are identified, and actions on each of these building blocks (see figure below).

Building block	Local focus to build the resilience of young people
Positive family, peer, and community relationships	Enhanced perinatal support with a specific focus on the mental health of mothers and infants
	Parenting programmes , which include fathers, where possible, and have a whole-family focus
	Intensive support for families facing difficulties, building on the Family Recovery Project model with embedded mental health expertise
	Investing in the social infrastructure of communities with a stronger focus on the needs of young people
Minimise adverse experiences and exclusions	Ensure vulnerable families and young people have a secure base within the community in terms of income, housing, and access to health, education, and employment – using a combination of universal provision and targeted approaches such as Housing First
	Community and family-based approaches to reduce harm caused by identifiable Adverse Childhood Experiences , such as abuse, domestic violence, bullying, or victimisation
Mentally friendly education and employment	Whole-school Social and Emotional Learning programmes that are universal but can offer additional support for more vulnerable children
	Whole-school approaches for addressing harmful behaviour , particularly bullying, substance abuse, and reducing exclusions
	Supporting successful transitions in education (eg, primary/secondary school transition) and into employment
	Encouraging employers to support the mental well-being of their workforce and make public reporting on employee engagement and well-being a requirement
Responding early and responding well to first signs of distress	Accessible and friendly 'one-stop-shop' services for young people – eg, the Australian Headspace model or the Tavistock-AFC Thrive model here in the UK. The best services are those that are co-designed with young people and their families
	An inclusive approach that involves family and friends in developing understanding and support, and that addresses social, relationship, or identity issues that may underlie young people's mental distress – eg, Open Dialogue

Table 1: Local action to build a resilient generation

Source: Burstow 2018

Another promising approach is that taken by Wales, where the **Wellbeing of Future Generations Act** 2015 aims to improve the social, economic, environmental and cultural wellbeing of Wales, with a focus on taking preventative action for the longer term. The Act has seven wellbeing goals: a prosperous Wales, a resilient Wales, a healthier Wales, a more equal Wales, a Wales of cohesive communities, a Wales of vibrant culture and Welsh language, and a globally responsible Wales. All public bodies are required to work towards all seven goals, setting a publishing wellbeing objectives and taking all reasonable steps in exercising its functions to meet those objectives. The Future Generations Commissioner for Wales acts as a guardian for the interests of future generations, by advising public bodies, carrying out research, carrying out reviews, making recommendations to public bodies, and reporting on progress (Department of Natural Resources 2015).

The Welsh Act therefore uses a combination of independent national leadership and legislated accountability at multiple levels for all public bodies. The focus is on sustainable development –

ensuring that the needs of the present are met without compromising the ability of future generations to meet their own needs. Such an approach could be expanded to take account of the current and future wellbeing of today's children and young people, who will be the future generations, thus explicitly including the present as well as the future.

6.5.5 Children in all policies – the case of Sweden

It is now well recognised that the foundations of mental health are laid down in early life. Therefore policies to promote and protect child wellbeing are a key part of policy approaches to mental health. Internationally, Sweden is an example of a country that ranks as one of the world's best performers in children's wellbeing across a range of health and social indicators, such as poverty, housing, mortality, injury, breastfeeding, adolescent risk behaviours, teenage births, child maltreatment, and preventable diseases (Scott 2014)(Bremberg, 2009)(Sandin 2012)(Wells and Bergnehr 2014)(OECD 2009). Sweden has progressively implemented many world-leading children's policies, and has a strong focus on early childhood and children's and women's rights. Policies include: a universal child benefit (up to age 16) and additional child and parenting allowances; 16-months paid parental leave; free health and dental care (up to age 20 in most regions); high quality and low cost early childhood education; and schools and pre-schools provide nutritious lunches to all children and often have co-located preventive and primary healthcare services (Scott 2014; Wells and Bergnehr 2014)(European Commission 2015). As well as minimal childhood poverty, Sweden also has a low level of income inequality, a factor that is also strongly associated with children's wellbeing (Pickett and Wilkinson 2007; Scott 2014).

Comparative case study research currently underway has explored the degree to which public policy is child-centred in Aotearoa New Zealand compared to Australia and Sweden (D'Souza 2018). Children's wellbeing was found to be far more coherently embedded in the policy process in Sweden (D'Souza, Signal, & Edwards, 2017; Haas, 1996; Sandin, 2012; Scott, 2014).

Preliminary findings suggest that a major explanation is a decades-long consensus across Swedish society that children are important and that caring for children is a top priority. Further, children were viewed as individuals in their own right and the concept of wellbeing was broad (Sandin 2012). Therefore, children, and the impact of policy on children, have long been a high priority in policy development and decision-making about policy options across sectors. While there were still differences of opinion in relation to policy details, that high-level consensus was broad and spanned political boundaries.

While Sweden's child-friendly society encouraged the development of a policy culture of prioritising children, each positive policy development reinforced and supported a more child-friendly society.

That virtuous cycle helped to enable pro-child laws, policies, and provisions to be progressively embedded. Sweden has also institutionalised and normalised children's rights over many decades (Sylwander 2001). Each development laid the foundation for further advances. For example, in response to the UN Convention on Children's Rights, Sweden established a Children's Ombudsman, reviewed legislation, introduced child rights education in schools, trained public servants and established a child rights coordinating unit in central government. A child rights strategy followed and was accompanied by implementation plans and guidelines, for example for child impact assessment. Sweden is now in the process of incorporating the UN Convention into Swedish law. Children's rights have also been institutionalised at a local level, for example, in organisational work plans, and in some areas there are local children's ombudsmen.

The case study research identified other contributing factors that appeared to support Sweden's shift to a "children in all policies" approach (D'Souza 2018). Sweden had over a century of community-based action that helped to change public attitudes about children or directly influenced policy development. Author Astrid Lindgren's resilient and strong Pippi Longstocking character is celebrated and there are many examples of child-wellbeing focused advocacy and "policy entrepreneurship" from professionals, academics, non-governmental organisations and community leaders (Bremberg 2009; Sandin 2012). High-level signals from political and bureaucratic leaders also appeared important for their symbolism as well as enabling the implementation of child-friendly policy.

Another likely contributing factor was Sweden's form of social democracy that is based on values of equality, solidarity, and freedom for every member of society including children and women (Bremberg 2009). Some scholars suggest that at the time the first social democratic government was established in the 1930s, Sweden's "population crisis" (low birth rates and high emigration rates due to poverty) also contributed to a specific paradigm shift in which children assumed a central position in public policy (Bremberg 2009; Sandin 2012). Ongoing social change in relation to human rights, gender equity and anti-discrimination movements may have also helped to promote the normalisation of children's rights.

6.5.6 Incorporating wellbeing and a child focus in all policies in Aotearoa New Zealand

Children are currently the focus of considerable policy activity in Aotearoa New Zealand and there have been significant developments in policy and in the institutionalisation of children's issues in recent years. There is now political leadership for children; the Prime Minister has a new portfolio for child poverty and there has been a Minister for Children since 2016. A child poverty reduction unit and a child wellbeing unit now sit within the Department of Prime Minister and Cabinet, and a child wellbeing strategy is being developed. Other improvements include immunisation, access to primary

care, paid parental leave, and Whānau Ora services. Children now have better legal protection from assault and there has been a policy focus on “vulnerable” children and reform of the child protection system. Recently Oranga Tamariki staff have been trained in trauma principles by Werry Workforce Whauraurau. However, Aotearoa New Zealand still fares worse in child wellbeing compared to most other advanced economies (UNICEF 2017) and it continues to have high rates of childhood poverty, housing problems, preventable diseases, youth suicide, mental health disorders, and violence to children. The question remains whether Aotearoa New Zealand has a political culture and policy process that appropriately prioritises the wellbeing of children and their caregivers.

As Australian political scientist Andrew Scott (Scott 2014) suggests, far from being a hypothetical scenario, Sweden is a practical example of what is possible in terms of children’s wellbeing. Countries such as Sweden demonstrate that a system of child-friendly public policy can be created and a “children in all policies” approach can become structurally embedded. Although the Aotearoa New Zealand context is different, the Swedish case study suggests that a combination of actions are likely to be needed so that Aotearoa New Zealand can improve the system of governance for children and implement stronger public policies for children’s wellbeing. The findings of the case study suggest that a crucial element is to build a culture of prioritising children throughout the policy development and decision-making process and to ingrain in society the idea that it is important for a country to prioritise the care of its children. Other key elements include ongoing: community and political leadership; advocacy; further strengthening child-centred governance structures; institutionalisation of the UN Convention on the Rights of the Child; and more generally, wider efforts to create a more equal society. However, each country must forge their own path and even the best-performing countries have room for improvement (for example, indigenous rights appear less developed in Sweden).

The WHO and the international health promotion movement also provide useful approaches and tools to help embed a wellbeing and equity focus throughout public policy (Kickbusch 2008, 2010; Leppo et al. 2013; World Health Organization and Government of South Australia 2010). “Health in all policies” (HiAP) recognises that “government objectives are best achieved when all sectors include health and wellbeing as a key component of policy development” (World Health Organisation and Government of South Australia 2010). The Adelaide Statement on HiAP states that “shared governance for health and wellbeing” is a complex but crucial element (World Health Organisation and Government of South Australia 2010). Political science is being used to help understand the policy process and the politics involved, and in particular, how policy agendas are set (Kickbusch 2010; Leppo et al. 2013; World Health Organisation and Government of South Australia 2010). The Adelaide Statement outlines multiple ways in which to build a HiAP approach as part of usual practice and the need to use political “windows of opportunity to change mindsets and decision-

making cultures” (World Health Organisation and Government of South Australia 2010). Within that context, many specific tools are available for different stages of the policy process, such as the Health Lens Analysis (Department of Health South Australia 2011), impact assessment, and the Health Equity Assessment Tool (Signal et al. 2008).

Aotearoa New Zealand has sufficient knowledge and the means to create its own form of world-leading child-friendly public policy and there are promising signals of change. Childhood, especially during the early years and in adolescence, is a crucial life stage in its own right as well as for laying the foundations for adult mental health. Embedding a system of public policy that prioritises wellbeing and equity, especially for our youngest citizens and their carers, is attainable in Aotearoa New Zealand provided there is stronger political and community leadership. With serious, systematic and sustained effort, Aotearoa New Zealand has the potential to be a world-leader in children’s wellbeing and by doing so, ensure that younger generations can start on a trajectory of life-long positive mental health and flourish.

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Appendix A

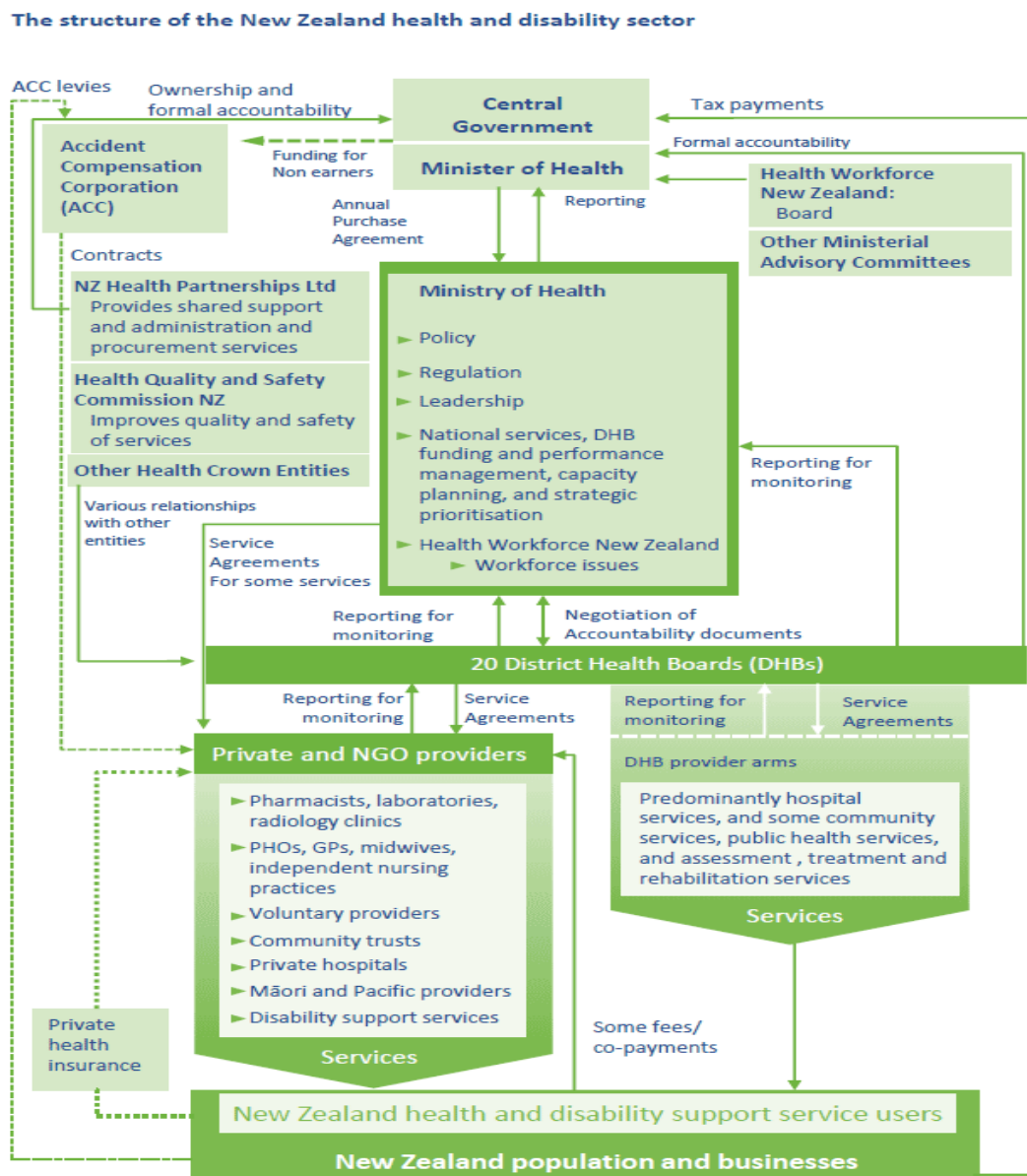
The New Zealand health system and mental health's place within it

A.1 New Zealand Health System

The New Zealand public health system (the health system) is available to all New Zealand citizens, and those whose immigration status allows them to access services. It comprises a complex network of different providers and services. The Ministry of Health (MoH) holds a central policy role and sets the health policy agenda, though non-government organisations influence the policy that is made.

Figure 1 illustrates the different components of the health system and how they interact.

Figure 1: Structure of the New Zealand Health and Disability sector



While the government has an interest in all public health services it does not directly provide them all or have an ownership interest in all services. Secondary and tertiary services are provided by District Health Boards (DHBs), crown entities governed by a mix of elected and appointed members. DHBs have two functions for all people within a geographic area: firstly, planning, funding and monitoring of all publicly funded services; and secondly, providing secondary and tertiary services, and public health services through Public Health Units (PHUs). PHUs may serve several DHBs. Further, tertiary services may be provided by one DHB on behalf of others. Secondary and tertiary services are free.

The public system is the major provider and funder of all health services; Health insurance comprises approximately 5% of total health care expenditure (WHO 2014). Those who hold policies have either hospital only or specific service focussed policies (eg. psychological counselling). Full comprehensive cover is rare because it is unnecessary. Apart from ACC which is paid via a levy on employee earnings (a type of social insurance), the health system is funded predominantly by a mixture of taxes and out of pocket payments by services users (eg. copayments for GP fees, prescription fees, copayments for radiology services and some ACC funded services).

New Zealand is a primary care oriented system (A. King 2001), which means that primary care is a universal service and is the gatekeeper to the rest of the public health system (except in a medical emergency). While primary care coverage is universal it is not fully funded: Most patients over 13 years of age will pay a copayment to go to a GP and \$5 per prescription item. Primary care services are overwhelmingly provided by private general practices (non profit, small business for profit and increasingly corporate ownership) and managed via a contract between DHBs and Primary Health Organisations (PHOs) which are umbrella groups for primary care and other services for an enrolled population. NGOs, via contracts with DHBs or central government, may provide specific services eg. health promotion to particular populations.

Figure 2 highlights that the while health systems can refine themselves so they improve health, are responsive to the population and are affordable to citizens, much that drives ill health is beyond the health system's control.

Figure 2: Contribution of certain determinants to health outcomes



Source: MOH 2017, p 6.

A.2 Mental health system

In the New Zealand mental health system the network elements of the wider health system are writ large. Policy is overseen by the MoH. Apart from some services purchased nationally (eg health promotion campaigns, forensic services) mental health funding is administered by DHBs whose purchasing decisions are governed by the Commissioning Framework for Mental Health and Addiction (Ministry of Health 2016), formerly the 'Blueprint' documents. Rules attached to mental health funding mean that a DHB cannot spend less than in a previous year and funding is focussed on the most unwell 3% of the population.

Since the 1990s all but the most seriously ill people have been cared for in community settings (WHO, 2014). For the 3% with the most serious illness, current mental health services are a mix of hospital and community based, community services publicly funded and provided by a mix of public, NGO and private services. Around 350 NGOs provide community based/ residential day services that include support, counselling, supported activities and hangout spaces. Specialist psychiatric/psychological support usually comes from a community based team, but ongoing practical support and support with daily life is provided by NGOs.

New Zealand's primary health care oriented system means that there is an emphasis on prevention and management in the primary care setting, and in the community. In addition to general medical services that will include mental health, there particular services that are available to people living with mental illness. Care Plus funds integrated care for people with two or more chronic conditions (which can include mental illness). While not mental illness specific, Care Plus is a particular annual

budget of extra funding that can be used to buy extra community based services (eg psychological counselling) to help keep people well.

Primary Mental Health is aimed at approximately 17% who suffer mild to moderate mental illness and who present in primary care. There is also funding for mild to moderate mental health problems at PHO level. Each PHO has different criteria (usually youth, Māori or Pacific or low income) for services that are accessed through GPs and may comprise sessions of talk or other psychosocial therapies or services. Services are free. These services are stepped and provide the most effective, least intensive interventions.

There are also free e-services and 0800 helplines available to anyone. For example, SPARX is a free e-therapy project using CBT, the lowdown targets depression, and Youthline provides phone counselling or email support. These services may be used by anyone, irrespective of whether they have had contact with the health system or have a diagnosis. National health promotion campaigns focus on stigma reduction and increasing awareness of mental wellness and the importance of early intervention. These are generally funded by MoH or related agencies.

Not all mental health services are fully funded from Vote Health or have a formal relationship with the social care sector which amplifies the network aspects of mental health service delivery in New Zealand. NGOs (who receive state funding or not) provide a range of services from phone counselling to therapeutic art are often part funded by government grants and rely on fundraising for the remainder of services. Others are fully reliant on fundraising.

Further, health funded services may be delivered in settings controlled by other sectors, for example school health clinics in low decile schools. Additionally, mental health and addiction services may be funded and provided by other parts of the health and social sector. ACC provides funding for rehabilitation for mental injury caused by physical injury or sexual abuse/assault; Education funds individual education programmes for children with learning difficulties or developmental problems (eg ADHD) and hosts health clinics in some low decile schools, most secondary schools have guidance counsellors, and tertiary institutions have support and health services available to all students; Justice operates three therapeutic courts (2 in Auckland, 1 in Wellington) that look at addressing the social and addiction issues that drive offending. In addition ordinary courts may order psychological evaluations as part of the trial process, and sentencing may include a requirement to attend certain court funded services. Family courts may also order certain types of counselling; Corrections offers group and individual rehabilitation programmes for prisoners who meet certain criteria. MSD may fund services for children who fall under Oranga Tamariki's umbrella and may fund people for certain services if there is a direct link between resolving a problem and ability to maintain employment. Defence funds services for returned armed services personnel who have sustained a

mental injury while on deployment. Housing may let contracts to NGOs to help those who suffer from mental illness maintain tenancies.

There is no central information on how many people pay out of pocket for extra services from private providers or who only use private providers. For example many workplaces offer free psychological counselling through schemes like the Employee Assistance Programmes (EAP) where managers or individuals can self refer for free counselling for work or life related distress. Government and private employers contract with this type of service. Further, the plethora of private psychological service providers indicates a reasonable uptake of mental health services by those who are able to pay.

Overall, mental health services could be described as an extreme example of network service delivery. On the one hand, this provides choice for service users and feeds diversity into service planning and funding. On the other it creates the risk of fragmentation and siloed working because of a lack of inbuilt system integration. There is no one central 'clearing house' or systematic process for aligning all mental health and associated social services. For some individuals, services provide navigators or case managers to manage different services from different organisations but this is not universal. The comprehensiveness of services depends on the skill of the individual navigator or whānau or the service rather than the mental health system itself. Comprehensive coordination within the health sector and across the health and social sectors appears to be good luck, rather than intentional design.

Appendix B: Strategies and models by level of integration

Level	Strategy or model	Issues raised in the literature
Funding	Funding models or strategies	<ul style="list-style-type: none"> ➤ Funding is a key strategy for integrated health care in many western countries. The potential impacts of integrated funding on integrated care are numerous including: improved access to care, increased community care (health and social care), reduced unplanned admissions and readmission, reduced total costs, improved outcomes and quality of care and improved patient and user experience. While there is some evidence for the effectiveness of particular funding arrangements across physical health and social care, the evidence base for effective funding strategies to enhance the integration of mental health services is lacking. ➤ Various funding and planning models exist internationally but vary across jurisdictions and are influenced by the cultural context and public policy framework within which they are administered. A variety of terms and models are used to describe the way funding is actually organised and delivered to health care recipients including <i>direct payments, individualised funding, self-directed care, case for counselling, consumer-directed care, individual budgets, personal health budgets, packages of care, transfer payments, cross charging, aligned budgets, lead commissioning, pooled funds, integration management/provision with pooled funds, structural integration, lead commissioning with aligned incentives</i> (Mason et al. 2015; Te Pou o Te Whakaaro Nui 2014). (See Mason et al 2015 – see Table 1; Te Pou o Te Whakaaro Nui 2014- see section 4 for more detail on funding and planning mechanisms in different Western countries). ➤ The UK Mental Health Foundation’s Inquiry into integrated health care for people with mental health problems found that “separate funding streams hinder integrated care, while pooled funding, and services commissioned across boundaries, increase the likelihood of patients receiv[ing] better care. Combining health, social care and other (e.g. education) budgets at a local commissioning level provides the opportunity to mirror the service delivery requirements of people who need a single coordinated approach to manage their mental health condition. Commissioners need to be aware that the support people with mental health needs want extends beyond traditional health and social care interventions, to help with issues related to lifestyle choices such as exercise and smoking.” (Foundation 2013). The report concludes that “the ability to pool funds from different funding streams into a single integrated care budget and shared protocols and partnership agreements are among the most important structural and organisation arrangements that can help to establish effective integrated mental health care” (Foundation 2013). ➤ <i>Aotearoa New Zealand context:</i> There is currently little published evidence of which funding models might support the integration of mental health services in Aotearoa New Zealand. Over 10 years ago, primary health organisations (PHOs) received funding to establish primary mental health services, which were targeted at people with mild to moderate mental health and/or substance use disorders. The first group of initiatives received funding from the Ministry of Health and were evaluated (Dowell et al. 2009). While the Primary Mental Health Initiatives (PMHIs) represented a significant investment in primary care service delivery and

		<p>infrastructure, the evaluation found that the size of improvements for service users did not differ significantly among the nine different models and that “no service delivery model offered an inherently superior value for money, or an inherently more cost-effective service compared to others” (Dowell et al. 2009). The Ministry now funds primary mental health care in all PHOs through ‘packages of care’. In 2010, the Mental Health Commission completed a study of the funding allocation methods used by DHB mental health funding and planning portfolio managers. The most common funding allocation methods reported were the rollover of historical contracts with minor adjustments, and the use of evidence of effectiveness to reprioritise services and allocate funds (Mental Health Commission 2010). This study identified a range of concerns with current mental health funding arrangements in Aotearoa New Zealand including: a focus on inputs and outputs rather than effectiveness; funding tied to secondary care rather than early intervention; poor service integration between primary and secondary; and lack of funding flexibility. Some of these concerns were echoed in Blueprint II which called for more personalised care, stronger partnerships between service users, family and providers, and greater alignment between the funding of disability and mental health services (Mental Health Commission 2012). A discussion paper commissioned by Te Pou o Te Whakaaro Nui (2014) has provided information to support discussions about individualised funding options for the Aotearoa New Zealand mental health and addiction context. Individualised funding has been implemented in many Western countries to manage social services and aims to empower people using services by increasing their choice and control over service delivery. In Aotearoa New Zealand individualised funding is available to some people who receive disability services but it is not available to people who use mental health and/or addiction services. This discussion paper does not however discuss how individualised funding may provide more effective integrated care at the system level. As part of Budget 2017, the previous government established a \$100 million cross-agency contingency to trial new approaches to improve mental health, while also helping to build an evidence base of ‘what works’. This funding was to be allocated across 17 time-limited initiatives representing a mix of trials, service enhancement and service expansion across a range of settings. To date there is little publicly available information or reviews on this funding.</p>
Administrative	Policies to support integration	<ul style="list-style-type: none"> ➤ <i>Policies versus plans:</i> The WHO distinguishes between mental health policies - long-ranging, visionary statements of values, principles and objectives for improving the mental health of the population – and plans – more detailed sets of actions that allow for the implementation of policies by articulating activities, resources and time frames (World Health Organisation 2004). ➤ <i>Primary health care policies:</i> Given evidence indicates that health systems with strong integrated primary health care (PHC) at their core are both effective and efficient at delivering appropriate services where they are needed most, many health care policies internationally (and in Aotearoa New Zealand) have focused on integrated primary health care, with mental health covered under this. See Australian report by Oliver-Baxter, Bywood, & Brown (2013) for further discussion and examples of policies that incorporate the support of integrated primary health care and integration between primary health care and other sectors care in Aotearoa New Zealand, England, Canada and the United States. For further reading see work by J D Fuller et al., 2011; Jeffrey D Fuller et al., 2009, 2011 in Australia who have reviewed the linkage strategies and combinations of linkages that have proven to be effective in primary mental health care and also identify which factors enable the development and sustainability of these strategies. ➤ <i>Intersectoral policies:</i> Mental health policies can explicitly include details on intersectoral collaboration and approaches to achieve

		<p>it, such as coordinating multi-sectoral leadership for shared goals and shared decision making. A recent review of policy documents containing approaches for intersectoral policy for severe mental illness in a sample of high income countries: Australia, Canada, Aotearoa New Zealand, Ireland, Scotland, Wales and including both national and regional mental health policies. Diminic et al., (2015) identified the following objectives or guiding principles within policy documents (For a more in-depth description of these objectives and guiding principles and relevant mental health policies see Table 1 in (Dinic et al. 2015)):</p> <p>a) <i>A whole of government approach</i>: This was an objective or guiding principle for three-quarters of jurisdictions and described in varying ways. Generally it is an approach which refers to the involvement of multiple levels of government and multiple government agencies in mental health;</p> <p>b) <i>System-level coordination and integration of services</i>: In many documents, this was linked to promoting recovery or streamlining and improving service access for people with complex needs. For example, Aotearoa New Zealand's policy documents outlined a stepped care model, including investment in programmes such as housing and employment that actively facilitate a return to natural community supports.</p> <p>c) <i>Increased social and economic participation</i>: Three-quarters of jurisdictions included documents describing activities related to improving social inclusion, such as stigma reduction, which can be delivered within mental health, but also many which were the primary responsibility of non-health sectors. For example, the Canadian strategy identified full participation in work, education and community life through provision of the right services and supports as key to recovery for people with mental illness, stressing the role that schools, workplaces and other community settings play in full social and economic participation.</p> <p>d) <i>Relationships with other sectors</i>: Within health, sectors for collaboration identified by nearly all jurisdictions were drug and alcohol and physical health care services, while aged care was highlighted by all but one jurisdiction outside of Canada.</p> <p>➤ <i>Aotearoa New Zealand specific</i>: For further reading on the history and policy context of primary mental health care in Aotearoa New Zealand see research report titled <i>Toolkit for Primary Mental Health Care Development</i> (Collings S. et al. 2010). For previous recommendations made for improving integration within primary mental health care in Aotearoa New Zealand see <i>Evaluation of the Primary Mental Health Initiatives Summary Report</i> (Dowell et al. 2009).</p>
	Accountability: linking investment to outcomes	<p>➤ A characteristic of many national policies for mental health is <i>accountability</i> and that the move to decentralise responsibility for mental health service planning, funding and delivery should in no way diminish the need for strong accountability and benchmarking. Accountability and transparency in the mental health system generally refers to the links between the investments made by governments to measurable improvements in outcomes for people with a mental illness.</p> <p>➤ There is little literature around what accountability for mental health looks like. Australia, as one of the first countries to develop a national policy for mental health has begun to question whether two decades of Australian rhetoric around accountability for mental health has been fulfilled. For further reading see Rosenberg (2017) for discussion around accountability in relation to mental health. Rosenberg argues that “a clear national approach to accountability for mental health has failed to emerge. Existing data focuses on administrative and health service indicators, failing to reflect broader social factors which reveal quality of life. In spite of twenty years of investment and effort Australia has been described as outcome blind, unable to demonstrate the merit of USD 8bn spent on mental health annually. While it may be prolific, existing administrative data provide little</p>

		<p>outcomes information against which Australia can genuinely assess the health and welfare of people with a mental illness. International efforts are evolving slowly. Even in high income countries such as Australia, resources for mental health services are constrained. Countries cannot afford to continue to invest in services or programs that fail to demonstrate good outcomes for people with a mental illness or are not value for money. New approaches are needed which ensure that chosen accountability indicators reflect national health and social priorities.”</p>
	Governance: health system and intersectoral governance	<ul style="list-style-type: none"> ➤ Health systems governance is currently a critical concern in many countries because of increasing demand to demonstrate results and accountability in the health sector, at a time when increasing resources are being put into health systems where institutional contexts are changing rapidly. Governance of the health system is the least well-understood aspect of health systems and conceptually and practically it remains poorly understood and subject to often vague and competing notions of both what its role is and how to address its weaknesses. ➤ The majority of literature on governance relates to the broader health system and not specifically mental health. Furthermore, existing literature on mental health system governance arises largely from low to middle income countries e.g. Ethiopia, South Africa. These studies involve qualitative interviews with policy-makers, planners, administrators and service developers and providers. <ul style="list-style-type: none"> ○ Example from South Africa (Marais and Petersen 2015) “Facilitative governance factors included a recent mental health care policy framework and national action plan that embraces integrated care using a task sharing model and provides policy imperatives for the establishment of district mental health teams to facilitate the development and implementation of district mental health care plans; the roll out of the integrated chronic disease service delivery platform that can be leveraged to increase access and resources as well as decrease stigma; and the presence of NGOs that can assist with service delivery. Challenges included the low prioritisation and stigmatisation of mental illness; weak managerial and planning capacity to develop and implement mental health care plans at provincial and district level; poor pre-service training of generalists in mental health care; weak orientation to integrated care; high staff turnover; weak intersectoral coordination; infrastructural constraints; and no dedicated mental health budget.” ○ Example from Ethiopia (Hanlon et al. 2014) “Particular strengths of health system governance included the presence of high level government support, the existence of a National Mental Health Strategy and the focus on integration of mental health care into primary care to improve the responsiveness of the health system. Weaknesses included low baseline awareness about mental health care planning, the presence of stigmatising attitudes, the level of transparency about planning decisions, limited leadership for mental health, lack of co-ordination of mental health planning, unreliable supplies of medication, inadequate health management information system indicators for monitoring implementation, unsustainable models for specialist mental health professional involvement in supervision and mentoring of primary care staff, lack of community mobilisation for mental health and low levels of empowerment and knowledge undermining meaningful involvement of stakeholders in local mental health care planning.”

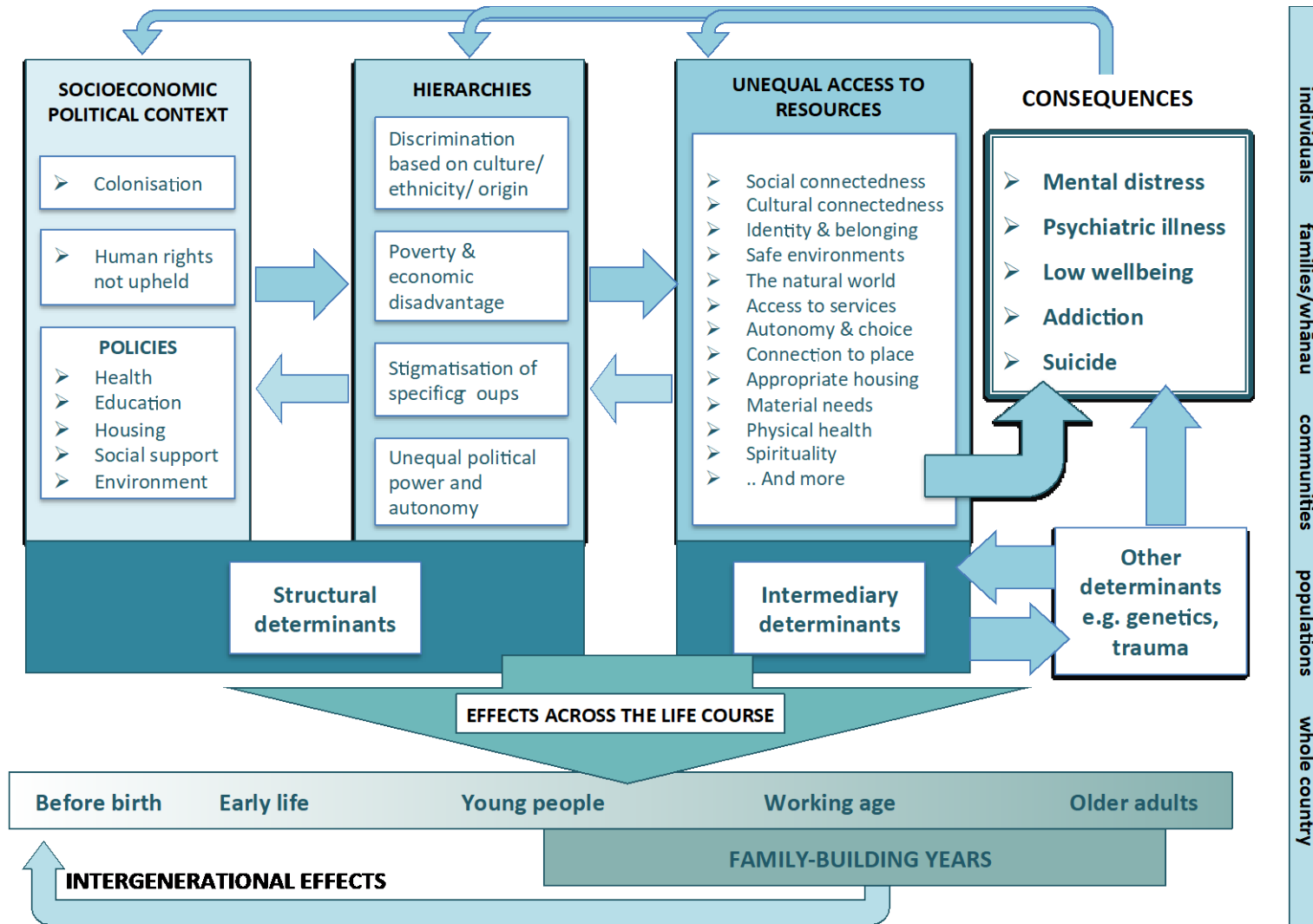
		<ul style="list-style-type: none"> ➤ There are numerous existing frameworks for assessing health system governance which include various core principles including: World Health Organization's (WHO) domains of stewardship; Pan American Health Organization's (PAHO) essential public health functions; World Bank's six basic aspects of governance; and United Nations Development Programme (UNDP) principles of good governance; Health System Governance assessment framework. See Mikkelsen-Lopez, Wyss, & de Savigny (2011) for summary of these governance elements. ➤ There are various contemporary issues in the governance of the health system that needed to be considered including the role of the state versus the market; role of the ministries of health versus other state ministries; the role of actors in governance - public sector, civil society and the private sector; static vs dynamic health systems; and health reform vs human rights-based approach to health. See (Siddiqi et al. 2009) for further discussion of these contemporary issues. ➤ Governance not only occurs within the health system but is also intersectoral. See report by McQueen, Wismar, Lin, Jones, & Davies (2012) for in-depth discussion of intersectoral governance structures including policy issues, government and parliament, bureaucracy and administration, managing funding arrangements, engagement beyond government.
Organisational	Inter-agency relationships/collaboration OR formalised interagency collaboration OR intersectoral linkages	<ul style="list-style-type: none"> ➤ <i>Evidence of activities to promote intersectoral linkages at systems level:</i> A recent systematic, qualitative review of studies describing attempts to coordinate the activities of multiple service agencies (between mental health and non-clinical support sectors) at the policy, programme or organisational level identified a number of mechanisms to promote positive system-level outcomes included (Whiteford et al. 2014). These included interagency coordinating committees or intersectoral/interface workers engaged in joint service planning; formalised interagency collaborative agreements; a single care plan in which the responsibilities of all agencies are described; cross-training of staff to ensure staff culture, attitudes, knowledge and skills are complementary; service co-location; and blended funding initiatives to ensure funding aligns with programme integration. Identified barriers included: adequacy of funding and technology; ensuring realistic workloads; overcoming 'turf issues' between service providers and disagreements regarding areas of responsibility; ensuring integration strategies are implemented as planned; and maintaining stakeholder enthusiasm. Whiteford et al. (2014) concluded that system-level intersectoral linkages can be achieved in various ways and are associated with positive clinical and non-clinical outcomes for services and clients. Some linkage mechanisms present greater implementation challenges than others (e.g. major technology upgrades or co-location in geographically remote areas). In some instances (e.g. co-location) alternative options may achieve equivalent benefits. ➤ <i>Examples of intersectoral collaboration from overseas:</i> <ul style="list-style-type: none"> ○ Housing and integration issues: Housing First (HF) in Canada - a consumer-driven programme (and a model consistent with the mental health recovery movement) shown to be an effective intervention for homeless adults experiencing mental illness, offering participants immediate access to independent housing and mental health support services (Stergiopoulos et al. 2016); Floating support services (FSS) in Finland is a mental health floating support which involves regular home visits conducted by workers who help and advise on housework, financial matters, medication, creating and maintaining social relations and other everyday problems that service users encounter in their daily lives. The main aim is to enable service users to maintain their independence and to continue living at their own home (Raitakari, Haahtela, &

		<p>Juhila, 2016; Juhila, Hall, & Raitakari, 2016).</p> <ul style="list-style-type: none"> ○ Health and social care coordination: Partners in Recovery Programme in Australia – a programme established to improve coordination of health and social care for people with severe and persistent mental illness and complex needs (Banfield and Forbes 2018). Critical to the success of the programme is support facilitator roles who act as a source of stability and relational continuity for clients, while also enabling connections with external services through the development of individual level partnerships and personal networks. ○ Collaboration between sectors: The UK Government Mental Health Crisis Care Concordat (signatories 2014) – commitment from national organisations in the UK, as signatories to the Concordat to work together to support local systems to achieve systematic and continuous improvements for crisis care for people with mental health issues across the UK. Improving outcomes for people experiencing mental health crises. The document sets out the principles and good practice that should be followed by health staff, police officers and approved mental health professionals when working together to help people in a mental health crisis e.g. developing bespoke guidance and model service specifications to support commissioners in delivering an integrated and responsive approach to meeting the needs of individuals experiencing a mental health crisis where there are also co-existing substance misuse issues.
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Delivery of services	Information technology (IT)	<p>There are a diverse range of empirical and descriptive publications relating to integrated care at the level of delivery or services and at the clinical level (below). This literature is too broad to summarise here. The most recent evidence with relevance to the Aotearoa New Zealand setting comes from the UK Mental Health Foundation's Inquiry into integrated health care for people with mental health problems (Mental Health Foundation 2013) which aimed to identify good practice, generate discussion, and draw up key messages on integrated healthcare for people with mental health problems. These included:</p> <ul style="list-style-type: none"> ➤ <i>Information sharing systems:</i> The inquiry found that "to support the effective day-to-day provision of integrated care to people with mental health problems a compatible information system within and across different organisations is essential. This system would establish individual electronic records of patients' integrated health and social care needs and interventions. It would also have the facility to record information about education, housing, welfare benefits and employment status, identifying specific occupational health needs. The information system would also require the ability to anonymise and aggregate health and social care records to inform a needs assessment of the local population, and hence local joint and multi-agency commissioning plans. In addition, further technological development and trialling in the field of IT use in health care could lead to significant improvements in integrated care for patients, and research in this area should be prioritised. ➤ <i>Multidisciplinary teams:</i> The inquiry found that "despite evidence that multidisciplinary care was not always effectively implemented, for example within Community Mental Health Teams (CMHTs) and through the care programme approach (CPA), we felt that there was a good reason why such models had survived for so many years as an integrated response to people's needs. We believe improvements in how these models work could be effected by the better interprofessional education and training of staff working within multidisciplinary teams, as advocated in this report." ➤ <i>Co-located services:</i> The inquiry found that "the co-location of primary care and specialist mental health staff was strongly supported in the evidence submitted to the Inquiry, and could bring significant benefits to patients in terms of a better integrated response to their needs – so long as the staff understand their respective roles and responsibilities and work willingly and collaboratively together. We are not convinced that the merging of organisations involved in providing different aspects of care to people with mental health needs would in itself improve that care". ➤ <i>Navigators:</i> The inquiry found "although we would not be prescriptive about the details, we strongly support the principle of a single named individual who can help people navigate their way through complex systems across health, social care, housing, employment and education (among other services) and help to pull together integrated care packages. In our view this would go a long way to ensuring that people received effective integrated care. We would suggest that the piloting and evaluation of such a role should be a research priority. ➤ <i>Liaison services:</i> The inquiry found that "there are significant benefits to establishing both psychiatric liaison services in physical health care settings, and physical care liaison services in mental health settings. Commissioners need to be better aware of the evidence for such services, the improvements to integrated patient care and the cost savings that can be made."
	Multi-disciplinary teams	
	Navigators	
	Professional networks	
	Staff training and development	
	Referral pathways	
	Continuity and coordination of care - single care plan in which the responsibility of all agencies are described	
	Relationships with patients and family carers	
	Case-management	
	Reduction of stigma	
	Liaison services	

Clinical	<p>Shared professional language</p> <p>Patient-provider communication</p> <p>Shared protocols</p> <p>Best practice</p>	<p>➤ <i>Shared protocols:</i> The UK inquiry found that “shared protocols between two or more organisations, or parts of an organisation, set out the responsibilities of each in delivering an agreed service and/or outcome. Although care needs to be taken to ensure staff ‘buy-in’ to shared protocols, where they have been established the evidence suggests they work well. We commend the development of shared protocols within and across the range of statutory, independent and voluntary organisations that support people with mental health problems”.</p>
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Appendix C: Social Determinants Framework



Appendix D: Data Sources for prevalence estimates

Sources of prevalence estimates; and a summary of how each of these sources obtained their data.

D.1 New Zealand Sources

The New Zealand Health Survey (NZHS) 2016/17 (Ministry of Health 2017c).

A household-based, face to face survey. Self-report for adults aged 15 years and over; parent/caregiver report for children aged 0-14 years. Adults: self-report of ever being told by a doctor they had a diagnosis of depression; bipolar disorder; or anxiety disorder (this included panic attacks, phobia, post-traumatic stress disorder, and obsessive compulsive disorder).

Rates for alcohol abuse were estimated from answers to the AUDIT questions for those who had drunk alcohol in the past 12 months. Past year amphetamine and cannabis used were classified as having used amphetamines or cannabis for recreational or non-medical purposes, or to get high, in the last 12 months.

Children (aged 2–14 years) were defined as having autism spectrum disorder if the child’s parents or caregivers had ever been told by a doctor that their child has autism spectrum disorder, including Asperger’s Syndrome.

Te Rau Hinengaro (TRH) – The New Zealand Mental Health Survey 2006 (Oakley Browne, Wells, and Scott 2006b).

Interview based on the World Mental (WMH) Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI) – a structured psychiatric diagnostic interview that can be administered by lay people, and results in DSM-IV diagnoses (in NZ). In this way it gives better estimates of true prevalence of health conditions than the NZHS which relies on self-report of past diagnoses of conditions.

Prevalence rates given are for DSM-IV diagnoses of Major Depressive Disorder (MDD), Bipolar Affective Disorder (BPAD); any Anxiety Disorder; Alcohol Abuse; Cannabis Abuse, and any Substance Use Disorder (SUD).

Kake et al 2008: Estimating the prevalence of schizophrenia among New Zealand Māori: a capture–recapture approach (Kake, Arnold, and Ellis 2008).

Averaged 12 month prevalence of schizophrenia in both Māori and non-Māori in New Zealand over 2000-2003, using two national mental health data sources.

Kerse et al 2017: Dementia: Supplementary Findings from LiLACS NZ for Section Five, ‘Service Use and Common Health Conditions’ Study Report (Kerse et al. 2017).

Te Puāwaitanga O Ngā Tapuwae Kia Ora Tonu/ Life and Living in Advanced Age, a Cohort Study in New Zealand, known as LiLACS NZ, is a longitudinal cohort study of advanced ageing in a Māori (aged 80-90 at enrolment) and non-Māori (aged 85 at enrolment) New Zealand population in the Bay of Plenty, NZ. Dementia was diagnosed with the Modified Mini Mental State Examination (3MS), and a subset of those diagnosed underwent a full dementia assessment conducted by a clinician.

Ministry of Health 2017: Suicide Facts: 2015 data (Ministry of Health 2017g).

The Ministry of Health reports deaths as suicide if they are classified as such by the coroner – data is from the New Zealand Mortality Collection.

Ministry of Health 2016: Suicide Facts: Deaths and intentional self-harm hospitalisations: 2013 (Ministry of Health 2016b).

This annual statistical publication presents suicide information received from the New Zealand Mortality Collection, and admissions to hospital for intentional self-harm sourced from the New Zealand National Minimum Dataset.

Ministry of Health 2010: Drug Use in New Zealand: Key Results of the 2007/08 New Zealand Alcohol and Drug Use Survey (Ministry of Health 2010a).

A randomised household survey (similar sampling frame to the NZHS) administered face to face, measuring alcohol and drug use among over 6,500 New Zealanders aged 16–64 years from August 2007 to April 2008.

Abbott et al 2014: New Zealand 2012 national gambling study: Gambling harm and problem gambling (Abbott et al. 2014).

This report gives the results from the baseline survey (2012) of the National Gambling Survey (NGS) 2012-2019. Over 6000 adults were interviewed face to face. Problem gambling was assessed using two internationally validated standardised scales: the Lifetime South Oaks Gambling Screen (SOGS-

R), which provides a measure of lifetime gambling problems; and the Problem Gambling Severity Index (PGSI), which provides a measure of current (past 12 months) gambling problems.

Rossen 2015: Gambling and Problem Gambling: Results of the 2011/12 New Zealand Health Survey (Rossen 2015).

Results of the gambling and problem gambling module questions included in the 2011/12 New Zealand Health Survey. Used the PGSI (see above) to assess past 12 months gambling problems.

D.2 Australian sources

Slade et al 2009: The mental health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing (NSMHW) (Slade et al. 2009).

This survey, as for Te Rau Hinengaro, was part of the WHO WMH survey initiative, and based on the WHO CIDI 3.0 diagnostic interview.

Morgan et al 2012: People living with psychotic illness in 2010: the second Australian national survey of psychosis (Morgan et al. 2012).

2010 Survey of High Impact Psychosis (SHIP) - Australia's second national psychosis survey. A 2 phase survey: in phase 1, screening for psychosis took place in public mental health services and nongovernment organizations supporting people with mental illness. In phase 2, a standardised interview was carried out with a randomly selected sample of those who screened positive for psychosis.

Jackson and Burgess 2004: Personality disorders in the community: Results from the Australian National Survey of Mental Health and Well-Being Part III (Jackson and Burgess 2004).

Used the 59-item International Personality Disorder Examination ICD-10 Screener (IPDE) – a structured diagnostic interview, to make a diagnosis of personality disorder.

Australian Institute of Health and Welfare (AIHW): Autism in Australia 2015 (Australian Institute of Health and Welfare 2017b).

Identification of autism is based on respondents to the Australian Bureau of Statistics Survey of Disability, Aging and Carers (SDAC) who report autism or related disorders as a long-term condition. The SDAC does not provide a diagnostic assessment or estimates of specific health conditions (i.e. it is not a diagnostic tool).

Australian Institute of Health and Welfare 2012: Dementia in Australia (Australian Institute of Health and Welfare 2012).

Data from a wide range of Australian sources, with dementia diagnosis based on comprehensive clinical assessment.

Australian Institute of Health and Welfare 2017: General Record of Incidence of Mortality (GRIM) books: Suicide (Australian Institute of Health and Welfare 2017c).

Information sourced from the AIHW National Mortality Database

Australian Institute of Health and Welfare 2016: National Drug Strategy Household Survey (NDSHS) 2016 (Australian Institute of Health and Welfare 2017e).

Stratified multistage household survey of the Australian population. Selected individuals could choose to complete the survey via a paper form, an online form or via a telephone interview. Participants were questioned about their drug use patterns, attitudes and behaviours.

Billi et al 2014: The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria, 2008–2012 (Billi et al. 2014).

The Victorian Gambling Study 2008–2012 (VGS) was a large, multi-design study of gambling among Victorian adults aged 18 and older at baseline (2008). 15,000 Victorians were sampled and telephone interviews conducted at baseline giving cross-sectional data. Those who agreed to follow up formed the prospective cohort, and were re-interviewed in 2009, 2010-11, and 2011-12. In 2011, 54 participants who scored PGSI 8+ in any wave were interviewed face to face in more detail.

D.3 International Sources

Kessler 2005 (US): Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R) (Kessler et al. 2005).

Results from US surveys that used a version of the WHO-CIDI 3.0 (as in TRH) – the equivalent survey to TRH, under the WHO World Mental Health Survey Initiative.

Alonso 2004 (Europe): Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project (Alonso et al. 2004).

Results from European surveys that used the WHO-CIDI 3.0 (as in TRH)

Wittchen et al 2011: The size and burden of mental disorders and other disorders of the brain in Europe 2010 (Wittchen et al. 2011).

Data from the EU, as well as Switzerland, Iceland, and Norway.

Estimates based on multiple sources: systematic literature review; re-analyses of existing datasets; national surveys; expert consultation.

Simeone et al 2012: An evaluation of variation in published estimates of schizophrenia prevalence from 1990–2013: a systematic literature review (Simeone et al. 2015).

Prevalence estimated from a systematic literature review.

McGrath et al 2008: Schizophrenia: A Concise Overview of Incidence, Prevalence, and Mortality (McGrath et al. 2008).

An overview of three related systematic literature reviews.

Lenzenweger 2008: Epidemiology of personality disorders (Lenzenweger 2008).

Reviewed personality disorder prevalences estimated in studies undertaken from the late 1990s to early 2000s in the US, Europe and Great Britain which used structured clinical interviews to diagnose personality disorder in community samples.

Samuels 2011: Personality disorders: Epidemiology and public health issues (Samuels 2011).

Reviewed studies undertaken in Australia, Norway, Great Britain and the US from 2000-2010 which used structured clinical interviews to diagnose personality disorder.

Tyrer et al 2015: Classification, assessment, prevalence, and effect of personality disorder (Tyrer, Reed, and Crawford 2015).

Reviewed studies published between 2000 and 2014 as part of the WHO International Classification of Diseases, Revision 11 (ICD-11) Working Group on the Classification of Personality Disorders.

Trull et al 2010: Revised NESARC Personality Disorder Diagnoses: Gender, Prevalence, and Comorbidity with Substance Dependence Disorders (Trull et al. 2010).

Prevalence of personality disorder was estimated from a nationally representative face to face community survey, with diagnosis of personality disorder made by DSM-IV criteria.

Coid et al 2006: Prevalence and correlates of personality disorder in Great Britain (Coid et al. 2006).

Used the Structured Clinical Interview for DSM-IV Axis II disorders (SCID-II) in a sample drawn from the British National Survey of Psychiatric Morbidity (a household survey similar to Te Rau Hinengaro and the Australian NSMHW).

Crawford et al 2012: The prevalence of personality disorder among ethnic minorities: findings from a national household survey (Crawford et al. 2012).

Secondary analysis of the information from the British National Survey of Psychiatric Morbidity, using SCID-II to diagnose personality disorder.

Elsabbagh et al 2012: Global Prevalence of Autism and Other Pervasive Developmental Disorders (Elsabbagh et al. 2012).

Data from a systematic review of epidemiological studies of autistic disorder and pervasive developmental disorder (PDD) worldwide. Diagnoses were given as DSM-IV or ICD-10 categories, or from validated clinical rating scales.

Williams et al 2008: Prevalence and characteristics of autistic spectrum disorders in the ALSPAC cohort (E. Williams et al. 2008).

A longitudinal cohort study of children born 1991-92 in the Avon area of England. Cases of ASD for children aged 11 identified through medical and education records; diagnoses made after a full multidisciplinary assessment from health records, and additional cases from children identified as having special educational needs.

Prince et al 2013: The global prevalence of dementia: a systematic review and meta analysis (Prince et al. 2013).

Systematic review of the world literature on dementia prevalence, with results divided into world regions.

Collerton et al 2009: Health and disease in 85 year olds: baseline findings from the Newcastle 85+ cohort study (Collerton et al. 2009).

Cross-sectional analysis of baseline findings from a cohort study of 85 year olds (all those born in 1921 in the Newcastle area). Data obtained from general practice record reviews and detailed health assessments.

World Health Organisation: Global status report on alcohol and health, 2014

Estimates of global prevalence of 'harmful use' of alcohol (comparable to alcohol abuse' in TRH and 'hazardous drinking' in NZHS) – rates given for WHO regions and individual countries.

Degenhardt et al 2011: What data are available on the extent of illicit drug use and dependence globally? Results of four systematic reviews (Degenhardt et al. 2011).

Systematic review of global studies on the prevalence of drug abuse and dependence (specifics of how dependence data was estimated for each study were not reported).

World Health Organisation 2017: Global Health Observatory Data: Suicide rates (World Health Organisation 2017b).

Age-standardised rates of reported suicide (criteria for reporting vary between countries)

Williams et al 2012: The population prevalence of problem gambling: Methodological influences, standardized rates, jurisdictional differences, and worldwide (R. J. Williams, Volberg, and Stevens 2012).

Collected 202 studies carried out from 1975-2012, with the aim of standardising problem gambling prevalence rates so as to facilitate comparisons between jurisdictions as well as within the same jurisdiction over time.

Abbott et al 2014: Gambling and Problem Gambling in Sweden: Changes Between 1998 and 2009 (Abbott, Romild, and Volberg 2014).

Results from the Swedish Longitudinal Gambling Study. Household survey of 15,000 individuals aged 16–84 chosen from the national register of the total population; the sample was stratified for age, gender and risk for gambling problems. A detailed questionnaire was administered over the telephone, with 25% unable to be contacted sent a postal survey. Gambling prevalence was estimated using the SOGS-R and the PGSI.

Appendix E Suicide prevention

E.1 Background: National suicide prevention strategies

New Zealand is one of 28 countries known to have national suicide prevention strategies. A national strategy not only provides a systematic way of developing a national response to suicide but is also a way of governments indicating a clear commitment to dealing with the issue of suicide (WHO 2014). According to the first World Suicide Report from the WHO (2014) *Preventing Suicide: A Global Imperative*¹¹, a comprehensive national suicide prevention strategy should have a number of key components:

- Surveillance- Increase the quality and timeliness of national data on suicide and suicide attempts. Support the establishment of an integrated data collection system which serves to identify vulnerable groups, individuals and situations.
- Means restriction- Reduce the availability, accessibility and attractiveness of the means to suicide (e.g. pesticides, firearms, high places). Reduce toxicity/lethality of available means.
- Media- Promote implementation of media guidelines to support responsible reporting of suicide in print, media broadcasting and social media.
- Access to services - Promote increased access to comprehensive services for those vulnerable to suicidal behaviours. Remove barriers to care.
- Training and education- Maintain comprehensive training programmes for identified gatekeepers (e.g. health workers, educators, police). Improve the competencies of mental health and primary care providers in the recognition and treatment of vulnerable persons.
- Treatment- Improve the quality of clinical care and evidence-based clinical interventions, especially for individuals who present to hospital following a suicide attempt. Improve research and evaluation of effective interventions.

¹¹ Taken from Table 4 of the World Health Organisation (WHO) 2014 report *Preventing suicide: A global imperative*

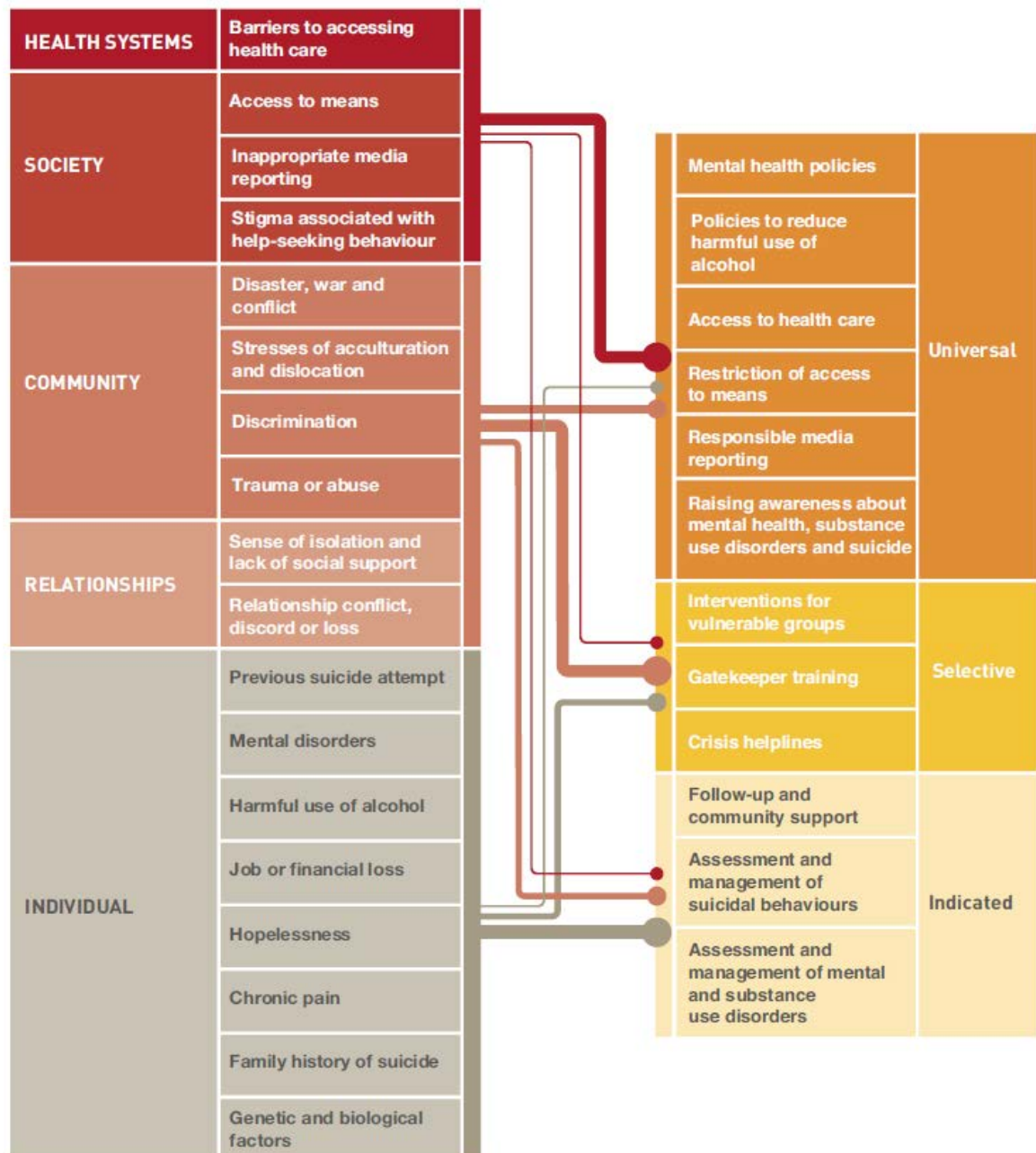
- Crisis intervention - Ensure that communities have the capacity to respond to crises with appropriate interventions and that individuals in a crisis situation have access to emergency mental health care, including through telephone helplines or the Internet.
- Postvention- Improve response to and caring for those affected by suicide and suicide attempts. Provide supportive and rehabilitative services to persons affected by suicide attempts.
- Awareness - Establish public information campaigns to support the understanding that suicides are preventable. Increase public and professional access to information about all aspects of preventing suicidal behaviour.
- Stigma reduction- Promote the use of mental health services, and services for the prevention of substance abuse and suicide. Reduce discrimination against people using these services.
- Oversight and coordination- Establish institutions or agencies to promote and coordinate research, training and service delivery in respect of suicidal behaviours. Strengthen the health and social system response to suicidal behaviours.

In addition, the WHO report notes that suicide prevention needs to be a 'multi-sectorial priority'. That is, it should involve not only the health sector, but also education, employment, social welfare, the judiciary and others sectors.

E.2 Universal, selective and indicated prevention strategies

National suicide prevention strategies guide suicide prevention activities. These activities are most commonly organised in a theoretical framework that distinguishes between universal, selective and indicated interventions or prevention strategies. **“Universal”** prevention strategies are designed to reach an entire population in an effort to maximise health and minimise suicide risk. **“Selective”** prevention strategies target vulnerable groups (based on characteristics such as age, sex, occupation status or family history). That is individuals may not currently express suicidal behaviours, but may be at an elevated level of risk. **“Indicated”** strategies target specific vulnerable individuals within the population e.g. those displaying early signs of suicidal behaviour or who have made a suicide attempt. These three levels of prevention strategies are shown in Figure E.1.

Figure E.1 Key risk factors for suicide aligned with relevant interventions (Lines reflect the relative importance of interventions at different levels for different areas of risk factors) (Source: WHO 2014)



E.3 The evidence base for universal, selective and indicate interventions

During the development of New Zealand's draft suicide prevention strategy in 2017 a large amount of work was commissioned, researched and generated for consideration by the cross-government working group developing the strategy. One of the key pieces of work undertaken was a rapid review, commissioned by the Ministry of Health, to provide a comprehensive synopsis of current knowledge about (i) risk and protective factors for suicidal behaviours, and (ii) the effectiveness of interventions to prevent suicide and suicidal behaviours. The rapid review summarised key findings from systematic review of international research literature and relevant studies from NZ, published from 2006-2016. Table E.1 provides a breakdown of the different types of suicide prevention interventions which the rapid review considered. In this section we summarise the key findings reported in the rapid review.

For more in-depth review and details of specific key findings and examples of interventions from the literature we direct the reader to the MOH rapid review itself.

Table E.1 Types of suicide prevention interventions at each of the three levels (Source: MOH rapid review)

Type of intervention		Interventions
Prevention	Universal	<ul style="list-style-type: none"> • National suicide prevention programmes • Means restriction policies • Media guidelines • Public messaging programmes • Alcohol control policies • Social welfare policies and employment policies
	Selective	<ul style="list-style-type: none"> • Suicide prevention centres • Community based suicide prevention programmes • School-based suicide prevention programmes • Tertiary education/campus-based programmes • Child welfare/juvenile justice-based programmes • Workplace-based suicide prevention programmes • Courts/prisons-based suicide prevention programmes • Programmes for defence force personnel • Rural programmes • Alcohol/drug misuse programmes • Parenting support and Early Start programmes • Programmes to strengthen cultural identity/continuity
	Indicated	<ul style="list-style-type: none"> • Training for health and social service providers • Support to primary care providers and health service planners • Providing education and support to carers of high-risk individuals • Telephone-based (crisis) suicide prevention services • Internet- and m-health-based programmes • Postvention
Treatment	Case identification	<ul style="list-style-type: none"> • Primary care screening programmes • Emergency Department (ED) screening programmes • Follow-up and ongoing contact after ED/hospital discharge
	Standard treatment for known disorders	<ul style="list-style-type: none"> • Psychotherapy and psychosocial programmes • Pharmacotherapy • Intensive care plus outreach • Home-based therapy • General hospital admission • Neurosurgery • ECT • Multiple/combined therapies
Maintenance	Adherence	<ul style="list-style-type: none"> • Follow-up and ongoing contact • Crisis (green) cards • Caring contacts • Safety and support plans • Inpatient admission • Treatment adherence programmes • Motivational interviewing
	Aftercare	<ul style="list-style-type: none"> • Long-term therapy • Service delivery/organisation and case management models

E.3.1 Key findings for evidence for effective universal interventions

Universal interventions target the general public or an entire population (e.g. national, regional, community, school) that has not been identified on the basis of individual risk. These programmes are designed to influence everyone within the specific population (e.g. means restriction, media guidelines).

Universal	<ul style="list-style-type: none">• National suicide prevention programmes• Means restriction policies• Media guidelines• Public messaging programmes• Alcohol control policies• Social welfare policies and employment policies
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Key findings from MOH rapid review:

- There are no reviews of the effectiveness of national suicide prevention strategies.
- There is good evidence from robust studies that restricting access to lethal means prevents suicides by those means, and may reduce the total suicide rate if the method restricted is highly lethal, widely available and accounts for the majority of suicides.
- The evidence base for means restriction has strengthened in recent years with evidence of significant reductions in suicide for barriers at iconic jumping sites, and for packaging restrictions for analgesics.
- Most suicides in New Zealand are by hanging but there have been few efforts to prevent suicide by hanging.
- There is good evidence that implementation of media reporting guidelines can reduce suicide and change reporting behaviours, but less evidence that these changes are sustained in the longer term. In general, journalists are neither aware nor supportive of guidelines. Ongoing investment in education, monitoring and partnership with journalists is required for effective adoption of guidelines. Australia and Austria have provided good models for the dissemination of guidelines and journalist engagement.

- There is some evidence for a short-term attitude change, but no evidence for sustained changes in attitudes, knowledge and behaviours, and no evidence of an impact on suicidal behaviours, for a range of public messaging programmes including those that focus on depression awareness, destigmatising mental illness, promoting help-seeking, or promoting health and wellbeing. Some studies have reported decreased help-seeking after exposure to programmes that promote help-seeking. Mass media campaigns focused specifically on suicide literacy and awareness appear to be most effective when they are delivered as part of a multicomponent suicide prevention strategy, while "standalone" suicide literacy campaigns appear modestly useful for increasing suicide literacy.
- There is good evidence that restrictions on access to alcohol (including higher taxes, minimum legal drinking age, zero tolerance for drink-driving, fewer regional alcohol outlets) contribute to suicide prevention on a general population level and to a reduction of alcohol involvement in suicide deaths.
- There is weak evidence that vocational interventions reduce depressive symptoms in the unemployed and help them get work. There are no reviews of the effectiveness of national suicide prevention strategies. No outcomes have been reported for multi-level interventions but there is indirect support for possible synergies in particular combinations within multi-level strategies.

E.3.2 Key findings for evidence of effective selective interventions

Selective interventions are directed at individuals or a population subgroup whose members are at risk of developing suicidal ideation or behaviours. Programmes are designed to prevent the onset of suicidal behaviours. An example of selective intervention is programmes that screen for suicide risk.

Prevention	Selective	<ul style="list-style-type: none"> • Suicide prevention centres • Community based suicide prevention programmes • School-based suicide prevention programmes • Tertiary education/campus-based programmes • Child welfare/juvenile justice-based programmes • Workplace-based suicide prevention programmes • Courts/prisons-based suicide prevention programmes • Programmes for defence force personnel • Rural programmes • Alcohol/drug misuse programmes • Parenting support and Early Start programmes • Programmes to strengthen cultural identity/continuity
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Key findings from MOH rapid review:

The review identified findings related to early intervention and parenting programmes, alcohol and substance abuse programmes, and interventions based in suicide prevention centres, communities, schools, tertiary educational institutions, workplaces, child welfare and juvenile justice facilities, and defence forces.

- School-based suicide prevention programmes, typically gatekeeper training, have been widely implemented but, in general, poorly evaluated, and most studies show no impact on suicide attempts or suicide rates. Outcome measures in most studies have been limited to knowledge and attitudes towards suicide. However, a few programmes have shown reduced suicidal behaviour (see review for examples)
- Studies of tertiary-level suicide prevention similarly showed no effect for educational or gatekeeper interventions, but one quasi-experimental study showed that method restriction and mandatory professional assessment of students who exhibited suicidal behaviours reduced the suicide rate.
- A small number of programmes have been developed for at-risk occupations (e.g. defence forces, police, the construction industry). Few have been evaluated in terms of their impact on suicidal behaviours and deaths. The best known is the US Air Force multi-component programme which includes leadership and gatekeeper training, increased access to mental health services, coordination of care for high-risk individuals, and a higher level of confidentiality for those who disclosed suicidality. The programme reduced suicide rates by 35%, and has been replicated with similar results.
- Studies of community-based programmes tend to be non-randomised, small, and under-powered to detect changes in suicidal behaviour or suicide deaths. Two reviews suggest Community Mental Health Care (a multidisciplinary community-based team) may reduce hospital admissions for suicidal behaviour (compared to treatment as usual, TAU) and is more likely than usual care to promote greater acceptance of treatment.
- There is evidence that family, parenting or parental support programmes can reduce or prevent substance use in adolescents, but no evidence that they reduce suicides. The most effective programmes appear to be those that emphasise active parental involvement, and developing skills in social competence, self-regulation and parenting.

- Reviews of community-based gatekeeper training for indigenous suicide prevention suggest such training may be a promising intervention in Indigenous communities but needs to be culturally tailored to the target population. In small studies, pre/post evaluations were generally positive and reported non-significant reductions in suicide and attempts and increased community protective factors. However, studies were of poor quality.

E.3.3 Key findings for evidence of effective indicated interventions

Indicated programmes target individuals within the population who can be identified as being at risk for suicide. Programmes are delivered individually or in groups with the goal of reducing risk factors and enhancing protective factors (e.g. case management for people who have made a suicide attempt).

Prevention	Indicated	<ul style="list-style-type: none"> • Training for health and social service providers • Support to primary care providers and health service planners • Providing education and support to carers of high-risk individuals • Telephone-based (crisis) suicide prevention services • Internet- and m-health-based programmes • Postvention
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Key findings from MOH rapid review:

The review identified the most common type of training and peer education programme is some form of gatekeeper training. However, despite wide use, gatekeeper training has most often been evaluated only in terms of pre/post training knowledge and attitude change and intent to intervene. Impacts on behavioural changes and suicidal behaviours have not been assessed. Overall, there are mixed findings with some evidence that training peers as gatekeepers to better understand suicide, recognise signs of suicide in peers and to intervene to connect people to help, can be protective for high risk individuals.

- Educating physicians to better recognise, treat and manage depression can reduce suicides, with greater effects for women patients, and older adults.
- There is little evidence that help-seeking programmes reduce suicidal behaviours.

- Provision of individualised support to parents of at-risk adolescents can effectively reduce adolescent risk behaviours and lead to overall improvements in adolescent health.
- Crisis telephone lines have been widely implemented but rarely evaluated. They have been found to be more useful for acute rather than chronic callers, and in one study were shown to reduce suicidal intent during the call. There is promising evidence for tele-mental health services for suicide prevention, and for internet-based interventions including internet cognitive behaviour therapy (iCBT) which has been shown to reduced suicidal ideation in the general population in RCTs and in a clinical audit of depressed primary care patients.
- There is no evidence that postvention programmes reduce suicidal behaviour, but evidence that individual counselling for traumatic grief can be helpful. One review evaluated community, school and family postvention programmes: No protective effect of any postvention programme was found for suicide deaths or attempts. Postvention counselling for familial survivors (spouses, parents, and children) of suicide generally helped reduce psychological distress in the short term.

E.3.4 Key findings for evidence of treatment and maintenance interventions

Treatment activities and interventions are targeted to people who have a mental disorder and/or suicidal ideation and behaviour (e.g. psychotherapy for people with depression). Maintenance activities refer to the range of psychoeducational, support, psychopharmacological, psychotherapeutic and support programmes employed to provide continuing, long term care for people with chronic and serious mental illnesses or suicidal behaviours.

Treatment	Case identification	<ul style="list-style-type: none"> • Primary care screening programmes • Emergency Department (ED) screening programmes • Follow-up and ongoing contact after ED/hospital discharge
	Standard treatment for known disorders	<ul style="list-style-type: none"> • Psychotherapy and psychosocial programmes • Pharmacotherapy • Intensive care plus outreach • Home-based therapy • General hospital admission • Neurosurgery • ECT • Multiple/combined therapies

Maintenance	Adherence	<ul style="list-style-type: none"> • Follow-up and ongoing contact • Crisis (green) cards • Caring contacts • Safety and support plans • Inpatient admission • Treatment adherence programmes • Motivational interviewing
	Aftercare	<ul style="list-style-type: none"> • Long-term therapy • Service delivery/organisation and case management models

Key findings from MOH rapid review:

- A large fraction of people who die by suicide visit their primary care provider in the month, and final week, before suicide, but suicidal ideation is rarely detected, and mental disorders may be missed. There is good evidence for benefits of screening for suicide risk in pregnant, postpartum and general adult populations, particularly in the presence of additional treatment supports such as treatment protocols, care management, and availability of specially trained depression care providers.
- Meta-analyses of pharmacological treatments for depression find that antidepressant treatment decreases suicide ideation in individuals aged 25 years and older. For youth (<25 years) antidepressant treatment decreases depressive symptoms, but does not always decrease suicidal ideation, and is associated with a 1-2% risk difference in new-onset or worsening suicide ideation, or suicide attempts.
- In addition to antidepressants, other drugs show an effect on suicidal behaviours. Meta-analyses show lithium, in people with unipolar and bipolar depression, is associated with a reduction in suicide and in self-harm incidents, with the effect perhaps achieved by lithium reducing the number of episodes of mood disorders or by decreasing impulsive and aggressive behaviour.
- Clozapine, compared to olanzapine, used in people with refractory schizophrenia, is associated with decreased suicide attempts and emergency referrals for suicide ideation.
- There is much current interest in the use of ketamine (and its metabolite, hydroxynorketamine (HNK)), for the treatment of acute suicidal behaviour in emergency departments. Single doses of ketamine can reduce acute suicidal ideation in patients with

major depressive disorder or bipolar disorder, and ketamine is also effective in treatment resistant depression.

- Electroconvulsive therapy, in depressed patients at high risk of suicide, has been shown to reduce suicidal ideation. There is current interest in the use of repetitive transcranial magnetic stimulation (rTCMS) for treatment of suicidal behaviour: high doses of rTCMS applied to the left prefrontal cortex are associated with rapid reduction of suicidal ideation.
- Reviews of psychotherapeutic and psychosocial interventions find that cognitive behavioural therapies are associated with reduced suicidal behaviour, repeat suicide attempts and self-harm in adults, older adults, and patients who present to emergency departments. There are also significant improvements in the secondary outcomes of depression, hopelessness, suicidal ideation, and problem solving. Dialectic behaviour therapy is associated with reductions in the recurrence of suicidal behaviour compared with usual treatment.
- There is no clear evidence for the effectiveness of provision of an emergency card ('green card') for priority re-presentation at EDs or mental health outpatient clinics. There is equivocal evidence for maintaining contact after ED presentations for suicidal behaviour – some studies find a reduction in repeat attempts in women, but no reduction in hospital admissions, while some studies find no effect.
- There is evidence from some studies that implementing systems changes related to features of mental health services associated with increased suicide risk is associated with decreased suicide rates. Decreases have been shown for service changes associated with extent of care, 24-hour crisis services, clear policies for the management of dual diagnosis patients, multidisciplinary reviews of suicide deaths, and safety checks of structures to remove hazards and potential ligature points.