



Te Pou o te Whakaaro Nui

The physical health of people with mental health conditions and/or addiction

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Introduction

This report is a summary of the 2017 evidence update, which follows on from an earlier literature review *The physical health of people with a serious mental illness and/or addiction: An evidence review* (Te Pou o te Whakaaro Nui, 2014). The 2014 review summarised well-established research evidence spanning many decades, in relation to the mortality and morbidity of people with mental health conditions and addiction¹, the factors contributing to these health disparities, and the evidence for promising approaches to address these issues.

In summary, the 2014 review found that:

- people living with serious mental health problems are at a greater risk of many chronic health conditions and have a much shorter life expectancy than their general population counterparts
- the disparities are due to greater exposure to known risk factors including low socio-economic status, high rates of smoking, alcohol and other drug use, reduced physical activity and poor nutrition, the side effects of psychotropic medication, and reduced access to physical healthcare
- a comprehensive approach involving collaboration across the health and social sectors, and including interventions at policy, healthcare service and individual behaviour change levels, is needed to address these inequities.

Methods

This narrative review seeks to answer what research has been published since 2013 which can inform the New Zealand Equally Well collaborative, as it seeks to improve the physical health of people with mental health conditions and addiction. It has three secondary questions.

1. How does recent evidence advance our understanding of higher rates of premature mortality and its causes?
2. What does a more in-depth investigation of the literature on psychotropic medications tell us about their impact on physical health?
3. What does recent evidence tell us about priorities for intervention at systems, health services, and individual levels?

¹ This report uses the term 'people with mental health conditions and addiction', to refer to people who have been severely impacted by mental health problems and/or addiction, including those who have been diagnosed with schizophrenia, major depressive disorder, bipolar disorder, schizoaffective disorder and/or addiction. When discussing the findings of particular studies, the terminology of the author(s) is used. This includes mental health and addiction service users.

A narrative approach was taken to bring together information about this particular subject from many sources, enable recommendations and conclusions to be drawn from very different perspectives, and to inform change at different levels across the health and health related systems.

The main focus was on systematic reviews, meta-analyses and large population studies conducted since January 2013. Single studies, particularly those published in New Zealand, were included where they helped to answer the research questions as well as qualitative studies of the experience of mental health service users. Studies of the impact of psychotropic medication on physical health and mortality and how to minimise this impact have been included in this update.

Articles and reviews were identified through searches using Google Scholar, EBSCO and Medline database searches, and the Equally Well collaborative's networks. Search terms used covered both mental health and addiction, health services and systems level changes, and individual level interventions. Articles were also hand-searched from references in review studies.

Clinical guidelines and other relevant international grey literature such as discussion papers and planning documents were reviewed and included where relevant to the questions. There are also many examples of good practice that have been developed in New Zealand in recent years that are showing promising results. Some examples are summarised in *Appendix A*.

Findings

How does recent evidence advance our understanding of the higher rates of premature mortality and its causes?

Recent systematic reviews investigating mortality and morbidity among people with mental health conditions and addiction add to a substantial evidence base indicating that very poor physical health outcomes in this group are a major contributing factor to premature mortality, relative to the general population. No evidence was found of a reduction in these health inequities. There is new evidence that the gap is widening (Hayes, Marston, Walters, King & Osborn, 2017) and that this is due to cardiovascular disease (CVD) mortality (Baxter et al., 2016).

Qualitative studies from New Zealand and Australia indicate that the experience of both service users and clinicians in primary care is often unsatisfactory (Ewart, Bocking, Happell, Platania-Phung & Stanton, 2016; Stokes, Tumilty, Doolan-Noble & Gauld, 2017). Reasons for this include practical and financial problems with access, time pressure limitations in general practice, communication difficulties between services, and inadequate clinical guidelines and information for clinicians about supporting people with multimorbidity.

Qualitative studies also describe the experience of mental health service users in accessing physical healthcare (Coventry, Small, Panagioti, Adeyemi & Bee, 2015; Ewart et al., 2016; Young, Praskova, Hayward & Patterson, 2017). They suggest that:

- service users are concerned about physical health problems and many go to extraordinary lengths, especially in terms of preparation, to be taken seriously
- significant changes are needed in how physical healthcare providers relate to mental health service users
- interventions that promote agency and self-determination are more likely to be effective
- income, social engagement and employment are the most important challenges identified by people with experience of psychotic illnesses.

Australian and New Zealand population studies (Cunningham, Sarfati, Stanley, Peterson & Collings, 2015; Kisely, Baghaie, Lalloo, Siskind & Johnson, 2015) comparing cancer mortality among mental health and/or addiction service users with the general population also found significantly higher cancer mortality within this group, even though both groups have similar rates of cancer. The higher mortality was found in part to be due to reduced access to screening, and delayed identification and cancer treatment for mental health and addiction service users.

Tobacco smoking is up to three times higher among mental health and addiction service users, compared with the general population (Te Pou o te Whakaaro Nui, 2014). Smoking is particularly prevalent among people in treatment or recovery from substance use disorders, with recent studies indicating that between 74 per cent and 98 per cent smoke (Thurgood, McNeill, Clark-Carter & Brose, 2016).

Injecting drug use significantly increases the risk of infection with HIV and hepatitis, especially hepatitis C. The international literature suggests that compared with the general population, people who inject drugs have a much higher risk of death, and the most common causes of mortality in this population are drug overdose and AIDS-related death (Gowing et al., 2015). Needle exchange programmes can protect people who inject drugs from HIV and hepatitis and have been in place in New Zealand since the early 1980s.

What does a more in-depth investigation of the literature on psychotropic medications tell us about their impact on physical health?

The evidence on the impact of psychotropic medication is conflicting. While the physical health impacts of medication can be serious and even life-threatening (Weinmann, Read & Aderhold, 2009; Baxter et al., 2016), so are the impacts of serious mental health conditions and addiction (Hor & Taylor, 2016). Clozapine, antidepressants and mood stabilisers are associated with reduced suicide risk (Malhi et al., 2015; Galletly et al., 2016), which partially explains why studies using national data suggest that all-cause mortality is higher among people with schizophrenia who are *not* receiving antipsychotics (Correll, Detraux, De Lepeleire & De Hert, 2015).

Antipsychotics, and to a lesser degree antidepressants and mood stabilizers, are associated with an increased risk of obesity, diabetes mellitus, CVD, sexual and reproductive health and other physical health problems. Higher dosages of antipsychotics, polypharmacy, and treatment of vulnerable (eg young or elderly) individuals are associated with a greater risk of harm to physical health (Correll et al., 2015). Psychotropic medication is also associated with relatively poor oral health (Kisely et al., 2015).

Methadone, most commonly used in the treatment of opioid addiction, has been associated with significant weight gain, chronic constipation and a range of other health impacts (Fenn, Laurent & Sigmon, 2015).

The increased risk of physical health problems among people taking psychiatric medications raises questions about the practice of gaining informed consent, and the extent to which it is possible for service users to have a say in their medication choices. Research indicates that service users are often not well-informed about the possible side-effects of their medication and many people, including those without mental health conditions and addiction, do not take medication as prescribed. Attempts to withdraw without clinical support are also common (Gibson, Brand, Burt, Boden & Benson, 2013). New Zealand findings support those of international studies and suggest that treatment systems need to provide better information and support to people on medication, and particularly those who wish to discontinue use so they can attempt this safely (Larsen-Barr, 2016).

What does recent evidence tell us about priorities for interventions at systems, health services, and individual levels?

Systems level interventions: International policy direction

The *Mental Health Action Plan 2013-2020* published by the World Health Organization (WHO) states that determinants of mental health and mental disorders include both individual attributes and “social, cultural, economic, political and environmental factors such as national policies, social protection, living standards, working conditions, and community social supports” (WHO, 2013, p.7). A comprehensive framework to reducing excess mortality in people with severe mental disorders includes the need to address these socioeconomic determinants and was developed in collaboration with the WHO by Liu and colleagues (2017).

This framework incorporates individual, health system, community, and policy-level actions to help people design, implement and evaluate interventions and programmes (see p.13 of this report). It is similar to the New Zealand Equally Well collaborative framework (see *Appendix A*). The authors emphasise that people with mental health conditions have a right to an equal standard of physical healthcare, and highlight the need to allocate resources for the routine data collection of key indicators of excess mortality at local, regional and national levels (Liu et al., 2017).

Several recent international policy and planning documents (see *Appendix B*), demonstrate similar approaches to improve the physical health of people with mental health conditions and addiction. These are supported by updated clinical guidelines (NICE, 2014; Malhi et al., 2015; Galletly et al., 2016) which reflect a shift towards recovery in mental health and addiction services, and recognise the importance of closer collaboration with primary care.

Drinking alcohol can have negative implications for physical health even at low levels (Stockwell et al., 2016) and there is a large evidence base about the many associated health problems (WHO, 2014; Holst, Tolstrup, Sørensen & Becker, 2017). There is very good evidence supporting a strong legislative and regulatory framework to minimise problem drinking in young people and adults at a population level, documented by the WHO over recent decades (Muhunthan, Angell, Wilson, Reeve & Jan, 2017).

Smoke-free hospital policies alone were found to be effective in reducing smoking prevalence in people admitted to psychiatric wards in one systematic review (Stockings et al., 2014). This review found a significant decline in cigarette consumption following discharge from hospital.

Encouraging access to employment for under-represented groups was identified by the Organization for Economic Cooperation and Development (OECD) as one of several policy levers to reduce the impact of income inequalities on mental health. The OECD (2015) recommends a stronger employment focus in the mental health system as follows:

- add employment-related outcomes to the quality assurance and outcomes frameworks of the health system
- incorporate employment support into the treatment plan for people with mental health problems
- develop employment support programmes for people with mental health problems.

Health services level interventions

Health screening and monitoring

Review studies indicate the need for a much greater alignment between clinical guidance and practice, particularly in relation to metabolic monitoring, screening for blood-borne viruses, CVD, cancer, and in the prescribing of psychotropic medication. Adherence to clinical guidelines for risk identification, management, and treatment for CVD is recommended for people on antipsychotic medication in a recent meta-review (Baxter et al., 2016).

For mental health and addiction service users, especially those on antipsychotic medication, routine screening and monitoring for health problems is essential. However, systematic reviews confirm inequities in terms of early diagnosis, use of monitoring and provision of treatment for physical health problems. “Despite their increased exposure to chronic disease risk factors, many people with severe mental illness have limited access to general healthcare with less opportunity for metabolic risk factor screening and prevention...” (Baxter et al., 2016, p.326).

New Zealand DHBs develop their own disease-specific clinical pathways, however a study of metabolic screening policies found that only three quarters of DHBs had some form of policy, with wide variation in terms of format and quality (Stavely, Soosay & O'Brien, 2017). This finding supports the need for more nationally consistent quality improvement processes, particularly around health screening and monitoring.

Improving access to primary care

There is recent evidence from a systematic review investigating integrated mental and physical health interventions for adults with mental health conditions (Whiteman, Naslund, DiNapoli, Bruce & Bartels, 2016) that identifies the value peer support workers bring when they are brought into primary care settings. Peer workers were found to improve access to primary care and improve physical functioning, emotional wellbeing, general health functioning, self-management efficacy and patient engagement.

This adds to promising research that peer staff can be effective in engaging people into care, reducing the use of emergency rooms and hospitals, reducing substance use among persons with co-occurring substance use disorders (Davidson, Bellamy, Guy & Miller, 2012) and delivering self-management components to address physical healthcare for individuals experiencing severe mental health problems (Kelly, Fenwick, Barr, Cohen & Brekke, 2014).

There is good evidence that brief interventions delivered by health professionals in primary care settings can be beneficial in reducing alcohol-related harm. The impacts of brief interventions tend to be modest but are potentially worthwhile as they are easy to deliver and low-cost. The effects have been shown to be maintained at least one year following the intervention (Tanner-Smith & Lipsey, 2015). There is promising evidence for the value smartphone applications can offer in treatment for alcohol use disorder and reducing alcohol consumption (Meredith, Alessi & Petry, 2015).

Based on strong evidence for the effectiveness of integrated employment support services with health services (Kinoshita et al., 2013) the OECD (2015) suggested that GPs be offered financial incentives for talking to patients' employers, and that governments should give GPs incentives for building employment support into their practices. Employment support for people with mental health conditions is available in some primary care settings in New Zealand with promising evaluation results (Te Pou o te Whakaaro Nui, 2013).

Poor oral health can predispose people to a range of chronic physical diseases, including diabetes and CVD. The cost of dental health services is a key barrier to access in most parts of New Zealand. Possible interventions, combined with addressing the cost barrier, include oral health assessment using standard checklists, help with oral hygiene, management of iatrogenic dry mouth, and early dental referral (Kisely et al., 2015).

Reducing stigma and discrimination

Stigma has been found to be the fourth-highest ranked barrier to help-seeking for physical healthcare among people with mental health conditions and addiction. Disclosure concerns are the most commonly reported stigma barrier (Clement et al., 2015).

Because it is thought to increase the risk of delaying treatment for physical health problems, diagnostic overshadowing (or the misattribution of physical health symptoms to mental health problems) among health professionals has been identified as a form of discrimination contributing to health disparities between people with and without experience of mental health problems (Noblett, Lawrence & Smith, 2015). Studies have found that social contact interventions, where people with experience of mental health conditions meet on equal terms, people who don't have mental health conditions can be effective in improving stigma-related knowledge and attitudes in the short term (Mehta et al., 2015; Thornicroft et al., 2016). Organisational support, including training, supervision and the ability to consult an expert, is also important in reducing stigma (van Boekel, Brouwers, Van Weeghel & Garretsen, 2013).

Peer support in mental health and addiction services

There is evidence to suggest that peer support is likely to have a positive impact on people's recovery, particularly group peer support programmes. Peer support also appears to offer promise for supporting better engagement with services, so people have a wide range of treatment options. In addition, evidence is emerging of the cost effectiveness of peer support programmes when compared with standard programmes (Fuhr et al., 2014; Te Pou o te Whakaaro Nui, 2017). A review of studies of peer support groups in addiction treatment found they had a positive impact on substance use, engagement, risk behaviours and substance related outcomes (Tracy & Wallace, 2016).

Comprehensive wellness programmes in mental health and addiction services

As was identified in the 2004 review, there is good evidence for making comprehensive wellness programmes an integral part of mental health and addiction services. All interventions focused on preventing weight gain on the prescription of psychotropic medication through to individual behaviour change interventions, should be informed by the evidence outlined in this review.

For example, key components of physical activity interventions in mental health settings were identified by Lederman and colleagues (2017) as outlined below.

- **Early intervention:** Intervention at the earliest stages of psychosis is imperative in preventing rapid weight gain typically seen at commencement of antipsychotic medication.
- **Routine metabolic monitoring:** Monitoring of cardiometabolic indicators (eg body mass index, blood pressure, waist circumference and metabolic blood profile).
- **Multidisciplinary approach:** All key stakeholders should be involved in physical activity promotion, including mental health team members, family and carers. Recovery-orientated consumer-centred practices can be supported by routine evaluation and consumer feedback.

- **Behaviour-change strategies:** Apply principles of motivational interviewing and behaviour-change counselling.
- **Individualisation:** Individualised physical activity counselling and supervised, tailored exercise programmes are associated with better adherence and lower drop-out.
- **Supervision:** Exercise professionals and physiotherapists are ideally positioned to provide safe, evidence-based exercise interventions.

Individual level interventions

Self-management interventions which have shown success for both mental and physical health outcomes as reported by Whiteman et al. (2016) are outlined below.

- Automated telehealth services for remote and home-based clients supported by a nurse at a mental health centre.
- Peer-led group education and support sessions in community and primary care settings.
- Individualised weekly sessions in goal development, recovery strategies, psychoeducation, healthy lifestyles, medication and health management and relapse prevention planning.
- Group sessions for people with mental health and chronic health problems in mental health outpatient settings involving peers and other social services.
- Psychosocial rehabilitation and diabetes self-management services, education and nutrition programmes, psychiatric support, intensive case management and residential support.
- Targeted training in illness management – psychiatric and diabetes self-management intervention based in primary care. Groups were co-led by a nurse educator and a peer educator with experience of mental health conditions, addiction and diabetes.

This review found good evidence for the effectiveness of interventions that aim to prevent or mitigate weight gain when prescribed psychotropic medications, including both behavioural approaches and metformin² for supporting weight control.

High-quality clinical trials suggest elements important to the success of self-management interventions include effective tailoring for people with mental health conditions and addiction, use of social support strategies and incorporation of both behavioural self-management skills training and environmental supports (such as smartphone apps). Interventions with higher frequency of contacts and longer duration had the most beneficial effects (McGinty, Baller, Azrin, Juliano-Bult & Daumit, 2016).

Given the proven acceptability of smartphone apps among mental health service users, trials show the potential value of this technology as additional support for improving the physical health of people with mental health conditions and addiction (Stephens & Allen, 2013).

² Metformin is an oral diabetes medicine that helps control blood sugar levels.

Smoking cessation

For interventions that include smoking cessation, Liu and colleagues (2017) recommend provider training and materials specific to people with mental health conditions. They found good evidence that combination treatment including counselling and bupropion, with or without nicotine replacement therapy, are effective with this population. The effectiveness of multifaceted text-message support in smoking cessation has been clearly demonstrated. Biochemically verified cessation more than doubled in well-designed trials (Free et al., 2013).

Nutrition

Recent reviews of good quality studies of nutrition interventions in adults with a diagnosis of a severe mental illness have found significantly improved weight, body mass index (BMI), waist circumference and glucose levels (Teasdale, Ward, Rosenbaum, Samaras & Stubbs, 2016). Nutrition interventions delivered by dietitians aiming to prevent weight gain at antipsychotic initiation, had the greatest effect. This supports their early inclusion in mental health service delivery.

Gates, Killackey, Philips and Alvarez-Jiminez (2015) concluded that preventing weight gain when the person starts antipsychotic drugs is likely to be more effective than attempting to reduce weight in chronic forms of psychosis. In the study of a 12-week individualised programme, Curtis and colleagues (2015) found that the intervention group experienced more positive outcomes with significantly less weight gain compared to standard care. The individualised programme incorporated (1) health coaching with motivational interviewing, (2) dietetic support, (3) exercise, (4) peer wellness coach, (5) antipsychotic medication switching after 5kg weight gain.

The impact of substance use on the appetite and absorption of nutrients is well known (Ross, Wilson, Banks, Rezannah & Daglish, 2012) but interventions to address this have been rare, apart from those providing thiamine in acute alcohol withdrawal to reduce the risk of Wernicke Korsakoff syndrome. However, evidence is emerging of the potential benefits for nutritional supplements (eg with zinc or S-adenosyl methionine, a chemical found naturally in the body), to prevent or reduce some types of alcohol-induced organ damage associated with ongoing alcohol use (Barve, Chen, Kirpich, Watson & McClain, 2017).

Physical activity

As noted in the 2014 Te Pou o te Whakaaro Nui review, physical activity interventions alone are less effective in improving health and wellbeing in people with mental health conditions than comprehensive wellbeing programmes supported by peers and professional staff. Exercise interventions were found to have no significant effect on BMI in one systematic review, but could improve physical fitness and other cardiometabolic risk factors (Firth, Cotter, Elliott, French & Yung, 2015). The study also concluded that psychiatric symptoms were significantly reduced by interventions that included around 90 minutes of moderate-to-vigorous exercise per week. In another systematic review of seven studies examining exercise interventions for people with schizophrenia, the interventions were found to improve cardiorespiratory fitness compared to control groups (Vancampfort, Rosenbaum, Ward & Stubbs, 2015). The exercise interventions ranged

from six weeks to six months and included a mix of treadmill walking/running, ergometer cycling and resistance training/muscle exercises.

Recommended priorities for action

Systems level changes

The following have been identified as priority areas for action and will involve changes at a systems level ie within policy and/or health service delivery systems:

- improve access to social and economic determinants of health, eg employment and housing
- provide employment support for people with mental health conditions and addiction in secondary and primary care settings
- ensure mental health parity with physical health
- deliver comprehensive wellness programmes for people in recovery from mental health conditions and addiction, involving peer and/or professional support
- greater access to nutrition interventions, delivered by dietitians
- use of motivational interviewing/behaviour change counselling
- eMental health support, eg phone apps and online self management programmes designed to support engagement and activation
- reduce exposure to tobacco smoke through smokefree policies and provider training, routinely offered smoking cessation support and delivery of counselling with or without nicotine replacement therapy
- improve access to dental health services for mental health and addiction service users eg through packages of care subsidies
- include psychotropic medication as a risk factor for cardiovascular disease and Type 2 diabetes in practice guidelines and decision-making aids in general medicine
- inform mental health and addiction service users of physical health side-effects of particular medications, and advice on how to mitigate these, including consideration of alternative medication and supported withdrawal.

Quality improvement

The findings of this report support a focus on quality improvement throughout the healthcare delivery system. The following have been identified as initial priorities for quality improvement in healthcare delivery:

- resourcing of service user (peer) leadership and participation in the planning and delivery of physical health initiatives across primary care and mental health and addiction services
- improved metabolic screening and monitoring within mental health and addiction services

- improved communications between mental health and addiction services and primary care
- improved mental health and addiction service user access to primary care
- adherence to clinical guidelines for psychotropic prescribing (particularly in relation to recovery-focused practice and the minimisation of polypharmacy) and the management of physical wellbeing among people with mental health conditions and addiction
- improved risk assessment and management of cardiovascular disease, cancer screening and access to treatment, for people who are in contact with mental health and addiction services
- workforce planning and development to support increased capacity and competency in the delivery of interventions to improve the physical health among people with mental health conditions and addiction.

Proposed research agenda

The findings of this review support the WHO's conclusion that "despite known risk factors for premature mortality, evidence for effective interventions is limited" (Liu et al., 2017, p.38). There is a need for a strategic, multi-disciplinary and coordinated programme of research in this area as detailed below.

Study design

- **Longer term outcome measurement for intervention studies.** Review studies often comment on the overall weakness of evidence for interventions aiming to address medical conditions in people with mental health conditions and addiction (Liu et al., 2017), particularly a lack of longer-term outcome measurement (Baxter et al., 2016).
- **Long-term outcome measurement for anti-discrimination interventions.** There is evidence that health professionals who have more contact or experience with a condition which attracts stigma are more tolerant and have more positive attitudes. However, evidence for the longer-term benefit of social contact to reduce stigma is inconclusive (Mehta et al., 2015; Thornicroft et al., 2016), suggesting the need for long-term follow up studies.
- **Monitoring and analysis of data about psychotropic medication use among children and young people.** It is likely that increasingly widespread use of psychotropic medication, including among children and young people in many countries, is also happening in New Zealand. This raises concerns about possible adverse mental and physical health effects associated with some psychotropic drugs for these populations.
- **Randomised controlled trials of interventions to prevent and reduce constipation and related complications in people prescribed clozapine.** Current evidence on the use of laxatives is deserving of further investigation (Every-Palmer et al., 2017b).

Research in healthcare delivery

- Understanding the barriers to the provision of physical health monitoring and the key aspects of effective programmes which have been evidenced to improve physical health (Baxter et al., 2016).
- Peer support programmes should be implemented within the context of high-quality research projects wherever possible (Lloyd-Evans et al., 2014). The evidence on peer support in primary, community and secondary care is promising. However, the quality of research in this area is not high.
- Studies which compare the costs of peer and professional led self-management programmes. Both peers and professionals have been found to be effective in improving self-management among people with mental health conditions and addiction, but few studies have analysed and compared **costs** between the two approaches (Kelly et al., 2014).
- Research on the underlying mechanisms for the increased cardiovascular disease risk after pharmacotherapy initiation is urgently needed (Correll et al., 2017) to develop more effective and targeted preventive and interventional treatments.
- The effectiveness of self-management in improving *physical health* outcomes among people with mental health conditions and addiction. Self-management interventions have been demonstrated in randomised controlled trials to be successful in improving *mental health* outcomes.
- New Zealand-based participative mental health consumer research for improving physical healthcare. Qualitative evidence appears to be primarily of relevance to the country of origin (Happell, Ewart, Platania-Phung & Stanton, 2016). Similar studies could be conducted to improve understanding of barriers to physical healthcare in New Zealand.
- Effective alternatives to medication for those people wanting to explore supported withdrawal from medications. This is particularly important since it appears that high numbers of people are attempting unsupported withdrawal from medication (Gibson et al., 2013; Salomon & Hamilton, 2013; Larson-Barr 2016).

Workforce development

Research is needed in support of effective workforce development planning to meet the physical health needs of people with mental health conditions and addiction who are living in the community. Although there is good baseline data on the approximately 3,000 mental health and addiction support workers in DHBs and NGOs (Te Pou o te Whakaaro Nui, 2015), little is known about the competencies, capacity and training needs of this workforce, and those working in primary care, in relation to their roles in improving physical health.

Conclusions

The full report brings together findings from a wide range of research investigating the physical health of people with experience of mental health conditions and addiction. It also summarises some qualitative research on the experience of mental health service users. These new qualitative studies vividly illustrate the personal cost of this disparity. The resulting picture is complex and multidimensional and reinforces many of the findings and the 14 recommendations from the 2014 Te Pou o te Whakaaro Nui review (see p.22). In particular, people with experience of mental health conditions and addiction need to be visible as a priority group in national and regional policies impacting on health outcomes, and key indicators of excess mortality for this population need to be routinely monitored.

This review sought to understand how recent evidence could advance our understanding of premature mortality in people with mental health conditions and addiction, causes and ways to reduce this excess mortality. There is a very large research base going back decades, which examines and defines the extent of the problem. Research published since 2013 complements well-established information about the relatively poor physical health outcomes of people with experience of mental health conditions and addiction. There is some evidence that the inequities are widening, in part due to increasing life expectancy of general populations in many countries. Research summarised in this review indicates that the widening inequities may also be due to structural socioeconomic factors. This includes increasing income inequalities in many countries which are associated with a range of social and economic challenges – loss of employment, poor quality accommodation and homelessness – all of which have been exacerbated in many countries following austerity measures after the 2008 global financial crisis. Other contributing factors are the relatively high rates of tobacco smoking, an international trend of increased prescribing of psychotropic medications, and difficulties in co-ordinating between primary care and secondary mental health services.

This review also sought to understand what recent evidence tells us about the priorities for intervention at systems, health services, and individual levels. As is often the case, the solutions are less well-researched than the problems. Recent review studies summarised in this report identify possible interventions across health, social and economic policy, healthcare service delivery, and at individual behaviour change levels. The evidence base is growing in strength, and certainly provides a good steer on where limited resources may be targeted to impact most effectively on the health disparities.

Follow-up studies overseas indicate that the gap is widening, this highlights the continuing importance of the Equally Well collaborative and the need for us nationally, to be routinely monitoring key indicators of morbidity and mortality for people who experience mental health conditions and/or addiction; so we remain vigilant and continue to understand the extent of and can address the health inequity in New Zealand.

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