Improving the Physical Health of Rural People Living with Mental Illness

Russell Roberts

The fact that people with serious mental illness die an average of 20 years earlier than the rest of the population, the majority from preventable causes, is one of the biggest health scandals of our time, yet it is very rarely talked about.
Professor Sue Bailey (Rethink 2013)

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R. Roberts (✉)
Charles Sturt University, Bathurst, Australia
e-mail: rroberts@csu.edu.au

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Abstract

Improving the physical health of people living with mental illness has become a national and international priority, and for good reasons. For every one person with a mental illness who dies from suicide, ten die prematurely due to avoidable physical health conditions such as cardiovascular disease, cancer, or respiratory disease. People living with mental illness can lead healthy productive lives. However, on average, people living with mental illness die between 50 and 59 years of age. While living with mental illness doubles the risk of early death, living with a mental illness in a rural community triples the risk of early avoidable death. Eighty percent of people with a mental illness also have a mortality-related physical health condition. Most of the causes of early premature death in people living with mental illness are avoidable and addressed with existing services and infrastructure; nonetheless, this disparity is growing. In Australia, the need to urgently address this issue is reflected in the physical health of people living with mental illness being listed as a priority in the Fifth National Mental Health Plan and the Equally Well National Consensus Statement.

The reasons for the poor health and early death of people with mental illness are complex and interrelated. However, they include poor access to services, stigma and discrimination, smoking, lifestyle factors, and the side effects of medication. The rate of early death of people with mental illness is twice that of the general population; in rural Australia this increases to three times the rate of early death. This could be due to people living in rural Australia having a higher burden of disease, higher rates of comorbidities, and fewer services. The challenge of addressing these disparities is compounded by geographical distances and a shortage of allied health and general and specialist medical and screening services.

This chapter reviews the epidemiology and the evidence on effective interventions and proposes a series of actions and clinical interventions for consumers, carers, and rural mental health workers. It also outlines actions rural clinicians can take to help address this national scandal, across the domains of a rights-based approach to care, ensuring physical health screening and treatment and lifestyle interventions and coordinating and integrating care. Finally, it provides examples of effective interventions in rural settings.

Introduction: Background and Context

Every year tens of thousands of Australians living with mental illness die needlessly of physical health conditions (Roberts 2019). Despite the fact that this tragedy could be effectively addressed with resources already available within the Australian health system, the gap in life expectancy between people living with mental illness and the rest of the population continues to increase (Walker et al. 2015). People living with mental illness have the right to the same quality of life and life expectancy as every other Australian. This chapter will outline some of the recent research on the epidemiology, recent national and international policy developments, and the etiology and treatment approaches in the rural health-care context.

Although people living with mental illness can live healthy, contributing lives, on average people living with mental illness die between 50 and 59 years of age (Lawrence et al. 2013). Countless studies and meta-analyses in Australia and internationally have consistently reported between 20 and 28.5 years of life lost for people diagnosed with mental illness (Bushe et al. 2010; Erlangsen et al. 2017; Olfson et al. 2015; Thornicroft et al. 2014; Walker et al. 2015). This gap is evident across countries, populations, study, and diagnosis. This early, preventable death is typically preceded by years or decades of poor health.

On the other hand, the diagnosis of a serious physical illness can lead to mental illnesses such as depression and anxiety. The effect of illness diagnosis on mental health is beyond the scope of this chapter. This chapter focuses on the development of mortality-related physical health conditions in people living with mental illness, thus aligning with the priorities of the *Fifth National Mental Health and Suicide Prevention Plan* (Department of Health 2017) and the *Equally Well National Consensus Statement: Improving the physical health of people living with mental illness in Australia* (National Mental Health Commission 2016).

People living with mental illness have three times the risk of respiratory disease (Australian Bureau of Statistics 2017), four times the rate of cardiovascular disease (Mangurian et al. 2016), and twice the risk of diabetes (Taylor et al. 2017). Death by suicide does contribute to the premature mortality of people diagnosed with mental illness, but ABS data indicate that for every one person living with mental illness who dies due to suicide, ten people die prematurely due to cancer, and cardiovascular or respiratory disease (Australian Bureau of Statistics 2017).

People living with mental illness had seven times the risk of premature cancer-caused death than the general population (Australian Bureau of Statistics 2017). Persons accessing mental health-related treatments comprise 12% of the Australian population and 55% of total deaths by cancer (Roberts et al. 2018) (see Table 1). Put

Table 1 Annual number of cancer-caused deaths in the Australian population – age 15–74

	Mental illness		Rest of population		Total population	
Underlying cause of death	No.	Row %	No.	Row %	No.	Row %
Trachea, bronchus, and lung cancer	2567	56	2031	44	4598	100
Colon, sigmoid, rectum, and anus cancer	1064	51	1018	49	2082	100
Breast cancer	1012	56	785	44	1797	100
Blood and lymph cancer	895	51	876	49	1771	100
Prostate cancer	523	61	332	39	856	100
Total cancer-caused deaths	**6061**	**55**	**5042**	**45**	**11,103**	**100**
					0	0
Total number accessing MBS/PBS	**2,806,407**	**12**	**21,507,719**	**88**	**24,314,126**	**100**

Prorated and adapted from ABS (Roberts 2019)

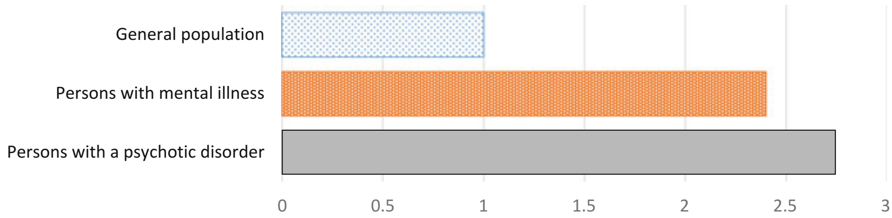

Fig. 1 Risk of premature death. (Australian Bureau of Statistics 2017; Cunningham et al. 2014; Te Pou o te Whakaaro 2017)

another way: the 2.8 million people with mental illness accounted for 6061 cancer deaths; the 21.5 million remainder of the population contributed 5042 deaths.

The above figures represent all Australians who accessed MBS or PBS mental health-related treatments. As such it comprises all mental illness including mild and moderate depression and anxiety. For people living with severe mental illness, the situation is much worse (see Fig. 1). They:

- Are six times more likely to die from cardiovascular disease (Lambert and Newcomer 2009; Nordentoft et al. 2013; Royal Australian and New Zealand College of Psychiatrists 2015)
- Are four times more likely to die from respiratory disease (Crump et al. 2013a, b; Cuijpers et al. 2014)
- Are three to four times more likely to die prematurely (Brown 1997; Brown et al. 2010; Holt and Peveler 2010)
- Are two to four times more likely to die from infectious diseases (Liu et al. 2017; Saha et al. 2007)
- Are likely to die 20–28.5 years earlier than the general population (Brown et al. 2010; Holt and Peveler 2010)
- Account for more than half of all avoidable deaths (Australian Bureau of Statistics 2017)

While living with mental illness doubles the risk of early death, living with a mental illness in a rural Australian community triples the risk of early avoidable death (Australian Bureau of Statistics 2017). For males, the disadvantaged, and unemployed, these risks compound and increase. People in rural areas with cardiovascular disease are more likely to experience poor health and comorbidities, greater risk of alcohol dependence, smoking, and lack of exercise (Fennell et al. 2016). This is compounded by a lack of access to services, geographical distance, poor cross-cultural communication, administrative burdens, and role definition issues (Happell et al. 2012). Australia is not making adequate progress in addressing this issue. In fact, the gap in life expectancy has increased during the last four decades (Walker et al. 2015).

Comorbidity

From the perspective of people living with mental illness, physical health includes functional mobility and health to participate socially and in practical activities of daily living (Happell et al. 2016a). Further, for these people, physical health is seen as connected to well-being, and the presence of physical illness adversely affects the quality of life and impedes recovery from mental illness (De Hert et al. 2011; Kisely and Simon 2006). Lorem et al.'s (2017) research concludes physical illness accounted for 12% of the total population effect on mental health symptoms. Australian research with people of Aboriginal and Torres Strait Islander descent found that poor physical health was by far the greatest contributor (42%) to psychological distress (McNamara et al. 2018). Similarly, the ABS found that the level of psychological distress in people with coexisting mental health and physical health conditions was twice that of those with only one health condition. Thus, addressing the physical health of people living with mental illness will also lead to significant improvement in mental health and emotional well-being.

Almost all (94.1%) people reporting a mental and behavioral condition report having another coexisting long-term health condition (Australian Bureau of Statistics 2016). Eighty percent of people living with mental illness have a **coexisting mortality-related physical illness** (Australian Bureau of Statistics 2016), and 55% have two or more coexisting physical health conditions (Australian Institute of Health and Welfare 2017). In other words, four in every five clients of a mental health service will have a mortality-related physical health condition, but for many, these conditions are undiagnosed. These data underscore the imperative for people living with mental illness to have regular, comprehensive physical health assessments and necessary treatment.

Avoidable Physical Illnesses Cause More Premature Deaths than Suicide

Suicide does contribute to the premature death rates for people living with mental illness. Intentional self-harm is the fifth most common cause of death for Australians accessing mental health MBS-/PBS-related services. However, between 80% and 94% of the causes of early death relate to physical illnesses (Lawrence et al. 2013; Saha et al. 2007). For every one person with a mental illness who dies due to suicide, ten die early due to cardiovascular disease, respiratory disease, or cancer (Australian Bureau of Statistics 2017; Roberts 2019). Put another way, in the 12 months from August 2011 to August 2012, 9506 people with mental illness died prematurely; of these 943 died of suicide (Australian Bureau of Statistics 2017). Suicide is tragic, but so is early, preventable death due to heart disease, and we should strive to save every life.

Conversely, poor physical health increases to suicidality and suicidal behavior. There is good evidence that chronic poor physical health and associated functional disability is a significant contributor to suicidal behavior (Fässberg et al. 2016; Jorm et al. 1995). Thus, one of the effective interventions to reduce the suicide rate is to focus on treating chronic physical health conditions. It is not difficult to appreciate

how chronic, unrelenting pain and illness, and its associated restriction on functional ability, contributes to psychological distress and feelings of hopelessness.

Specific Risks and Challenges

Contributing Factors and Implications for Care

There have been many reasons posited to account for the poor physical health of people living with mental illness. They include a set of interrelated, compounding factors such as stigma, smoking, lifestyle, poor access to care, poor quality care, the impacts of medication, and the impact of the mental illness itself. While the reasons for the poor health and early death of people living with mental illness are complex and interrelated, the key factors of discrimination, smoking, medication side effects, lifestyle, and community engagement have been repeatedly identified (Lawrence et al. 2013). These factors can guide and inform the focus of care and structure of recovery plans. These factors are addressed below.

Smoking

Smoking kills 50% of long-term users (U.S. Department of Health and Human Services 2014). It is probably responsible for most of the deaths of people living with mental illness (Royal College of Physicians and Royal College of Psychiatrists 2013). However, in focus group discussions on the causes of poor health, people living with mental illness do not raise smoking as a physical health risk factor (Happell et al. 2016b). This presents a challenge for the rural mental health clinician.

The other challenge is that many mental health professionals believe smoking is calming and good for mental health (Prochaska et al. 2017). The "self-medication hypothesis" (much of it funded by tobacco company research) has insidiously crept into health professionals' consciousness and attitudes towards smoking (Prochaska et al. 2007). These attitudes possibly contribute to the fact that only about one-third of clinicians suggest quitting and offer support, advice, or guidance to help clients quit smoking (Sharma et al. 2017).

Contrary to popular belief, people living with mental illness can quit smoking with the same success rate as the general population (Baxter et al. 2016), and systematic reviews have shown that quitting *improved* mental health and reduced depression, anxiety, and stress levels of people living with mental illness (Taylor et al. 2014).

Nationally, reducing the percentage of the population who smoke has been one of Australia's most outstanding public health successes. Unfortunately, due to widespread mistaken beliefs concerning mental illness and smoking, this public health success has not extended to those living with mental illness (Szatkowski and McNeill 2014). Encouraging and supporting smoking cessation efforts should be a

priority action for all health professionals working with people living with mental illness.

Medication Effects

Antipsychotic medications have numerous detrimental side effects and have been associated with diabetes, cardiovascular disease, and obesity (Galletly et al. 2012; Vancampfort et al. 2013). Many of these side effects are related to poor health and increased risk of early death. Overall, however, it appears that the use of antipsychotics has a positive effect, improving the quality of life and increasing longevity (Baxter et al. 2016; Tiihonen et al. 2009). This is not an uncontested view however, with other studies indicating no effect or increased mortality-related risks associated with the use of second-generation antipsychotics (Saha et al. 2007; Weinmann et al. 2009).

The differences in research findings may be related to treatment adherence, the population studied, the number of antipsychotics, and the type of antipsychotic a person is taking. For instance, the weight gain associated with antipsychotic use can vary from 4.4 kg to 16 kg depending on the type of antipsychotic used (Teasdale et al. 2017). In sum, it appears the use of antipsychotics improves functional ability, and reduces psychosis and suicidality. On the other hand, antipsychotics also tend to decrease physical activity and increase weight and the risk of developing diabetes and metabolic syndrome.

In the face of rural allied health shortages, the mental health worker has an important role coordinating with other health professions, especially rural pharmacists and GPs (and if available rural psychiatrists) to review the prescription and use of antipsychotics and other medications. Polypharmacy poses a significant risk to the health of people living with mental illness. Both GPs and pharmacists are skilled and widely geographically dispersed professions. Engaging these professions in the review and thoughtful prescription of medications is a key way rural mental health workers can make a significant contribution to the physical health of people living with mental illness.

The guidance to rural mental health workers is summarized in the Equally Well National Consensus Statement on improving the physical health of people living with mental illness:

> Impacts of medication (both positive and negative) should be regularly assessed, and alternatives should be considered if a medication has a potential negative impact. People living with mental illness have a much higher risk of developing metabolic syndrome. Therefore anyone prescribed antipsychotic medication should be given clear and understandable verbal and written information about the medication's risks and benefits. Steps should be taken to limit side-effects such as obesity, cardiovascular disease and diabetes. People should be encouraged to have a support person and/or carer present during these discussions and be supported to make treatment decisions. (National Mental Health Commission 2016, p. 18)

Exercise

Moderate exercise has been shown to improve physical and mental health and lessen cardiovascular disease risk even when not associated with weight loss (Rosenbaum et al. 2014). It has also been consistently found to lessen the symptoms of schizophrenia and depression (Schuch et al. 2016). For people living with depression, the effect is so significant that the authors recommend that exercise should form a routine part (step zero) of care planning and treatment.

People living with mental illness face many barriers and challenges to engaging in regular moderate physical activity. These include cost, geographical distance, and lack of support and companionship (Shor and Shalev 2014). This is often compounded by poor physical health, poor mental health, low motivation, low self-efficacy, feelings of hopelessness, and poor self-esteem (Shor and Shalev 2014). These obstacles help explain why it is difficult for people living with mental illness (and indeed many in the general population) to meet recommended exercise guidelines.

While there is a good deal of evidence indicating the effectiveness of exercise for people living with mental illness, there is also a good deal of evidence indicating the *ineffectiveness* of exercise programs (Baxter et al. 2016; Farholm and Sørensen 2016). As previously discussed, there are significant hurdles to overcome to increase exercise levels. The duration of engagement with exercise programs is significantly related to positive change. Managing motivation appears to be a key factor determining the effectiveness of these programs (Farholm and Sørensen 2016).

These results underscore the importance of engaging, partnering, and maintaining client motivation to exercise and participate in exercise programs. Family members, carers, support people, and peer workers can boost motivation and provide companionship. Psychologists can assist in designing the motivational components of these programs. Finally, physiotherapists and exercise physiologists should be involved in the design of programs to ensure they are appropriate to the age and physical condition of the participants. The collaboration skills of the rural mental health workers are critical to locating, engaging, and coordinating specialist allied health professionals into an integrated, evidence-based program.

Diet

Weight gain is a significant contributor to poor mental health and poor physical health. Rapid weight gain can occur within the first 12 weeks of starting antipsychotics and increase dramatically thereafter (Teasdale et al. 2017). The amount of weight gain varies considerably based on the antipsychotic used. In addition, the diet of people living with severe mental illness generally comprises fewer fruit and vegetables and is lower in fiber and higher in fat than the general population (Teasdale et al. 2017). While systematic reviews have found that nutritional interventions can lead to significant reductions in BMI, blood glucose, and weight (Teasdale et al. 2016), the most successful interventions have addressed the

challenges of poor attendance, low motivation, and high sedentariness (Teasdale et al. 2016).

A Cochrane review (Pearsall et al. 2016) found that mental health worker advice on nutrition and diet was frequently not evidence-based. This underscores the importance of the involvement of dieticians and nutritionists in care planning for people at risk of diabetes or obesity.

Social Inclusion

People living with mental illness not in paid employment have six times the risk of premature death compared to those in full-time employment, and social disadvantage carries three times the risk of premature death (see Fig. 1). There is very likely a covariance between these variables, with poor health and poor mental health related to functional ability, employability, and social participation. However, this highlights the importance of developing goals of increased participation in work, education, and community. Social participation is both a marker and a predictor of mental and physical health. Working towards the goal of meaningful social participation helps all in the clinical team focus on the interim goals of good physical health and functional ability. Effective partnership with vocational, educational, and rehabilitation specialists helps the consumer, clinician, and carer to maintain focus on improving physical health, functional ability, and social participation.

National and International Policy Context

In response to this national health crisis, Australia has produced a framework to prioritize action, *The Australian National Consensus Statement, Equally Well: Improving the physical health of people living with mental illness in Australia* (National Mental Health Commission 2016). Equally Well (www.equallywell.org.au) was launched in July 2017 and is the result of broad consultation during 2015 and 2016. More than 90 national organizations, including all state and territory governments and peak bodies, have signed up to "making the physical health of people living with mental illness a priority at all levels: national, state/territory and regional" (National Mental Health Commission 2016) (p.7). Subsequently, the physical health of people living with mental illness has been made a national priority of the Fifth National Mental Health and Suicide Prevention Plan (Department of Health 2017). Among other recommendations to improve the physical health of people living with mental illness, the Plan recommends implementing the actions of the Equally Well Consensus Statement.

Improving the physical health of people living with mental illness is becoming an international priority, with New Zealand (Roberts et al. 2018) and the UK (Bell and Hughes 2019) also introducing Equally Well initiatives. In addition, the World Health Organization has released its guidelines for the management of physical health conditions and mental illness (World Health Organization 2018), and the

Lancet Commission has published its blueprint for protecting the physical health of people with mental illness (Firth et al. 2019).

The Commonwealth Department of Health has summarized the implications of Equally Well in its guidance to Local Health Networks/Districts and Primary Health Networks in which it requires:

- *Planning for early intervention and prevention activity to reduce the impact of mental illness on physical health, particularly addressing lifestyle issues early in disease. This could, for example, mean offering routine smoking cessation and support services.*
- *Building in expectations of routine screening for physical health needs of people with mental illness and regular medication review.*
- *Ensuring access to services for physical health needs is readily available when the screening process detects these needs; consideration of the mental health needs of people living with a chronic physical illness.*
- *Introducing physical health questions to standard measures of consumer experience (e.g., through the Your Experience of Service Survey).* (Integrated Regional Planning Working Group 2018) (p. 41).

The remainder of this chapter will address the practice implications of these national policies and international guidelines for rural mental health workers.

Practice Implications

Working Effectively as Part of the Available Health System and Supports

The implications of the research into the link between mental illness and physical health are wide-ranging and profound. The failure to effectively address this public health issue in Australia is a national scandal, especially when introducing a suite of simple interventions could prevent most of these physical health conditions (Australian Institute of Health and Welfare 2019). If rural mental health workers fail to consider and address physical health as part of their routine practice, this will result in chronic poor health and premature death for many of their clients. This early death is typically preceded by years of poor health and reduced functional ability.

As previously discussed, the importance of this issue has been recognized nationally, but each rural mental health worker has a part to play in implementing this locally with individual clients. The practical, clinical implications of this research and the national policies relating to the poor physical health of people living with mental illness are dealt with in four parts:

1. Adopting a human rights-based response
2. Ensuring physical health screening and appropriate medical treatment
3. Addressing the key lifestyle factors
4. Using an integrated-care approach

Adopting a Human Rights-Based Response

> If you are not doing human rights, you are not doing mental health care. (Maylea and Daya 2019)

A Right to Equal Access to Quality Care

Fundamentally the physical health of people living with mental illness is a human rights issue. The gap in life expectancy between people living with mental illness and the rest of the Australian population illustrates that people living with mental illness still are stigmatized and discriminated against in the health system. Currently, people living with mental illness do not get the same access to quality physical health care as the general population. As a consequence the 13% of the population who access mental health-related treatment constitute more than 50% of all the premature deaths (see Fig. 2). This disparity has been getting worse during the last 30 years (Walker et al. 2015) and will continue to do so, unless we do something different. Firstly, and fundamentally, rural mental health workers must advocate for the rights of people living with mental illness. They need to ensure their clients have equal access to quality physical health care across all stages of the health journey. This includes getting the same quality and level of access to screening, effective treatment, and the necessary medical interventions.

A Right to Participate in Care Planning

People living with mental illness and their carers have a right to be involved in decisions that affect their mental health, physical health, and well-being. Firstly, this means clinicians listening and taking their clients' physical health concerns seriously. Consumers' experience of mental health care is that clinicians often do not appreciate the importance or impact of their physical health concerns (Happell and

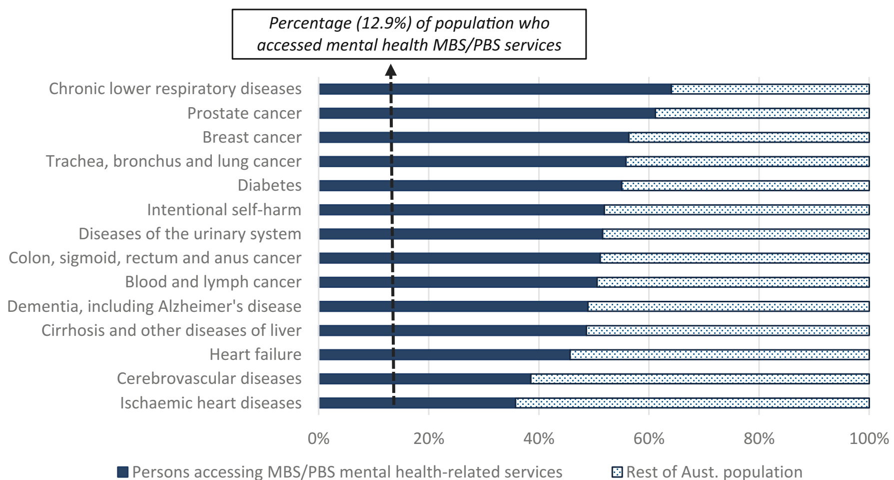

Fig. 2 Percentage of total population deaths of people with mental illness against population prevalence, by disease type. (Australian Bureau of Statistics 2017)

Ewart 2016). This process of focusing on the mental health complaint and ignoring the client's physical health concerns is called "diagnostic overshadowing" (Rethink 2013) which results in life-threatening conditions going undiagnosed and untreated leading to early and needless death. Clinicians must be attentive to any physical health concerns raised by their clients. Further, they should actively seek information regarding each client's physical health status (see Part II: Screening).

Carers also report being ignored or excluded from care planning, and their insights from years of experience of caring and observing health-related behavior are mostly ignored (Happell et al. 2017). Not only is this contrary to recovery-focused care, it also excludes invaluable information useful in developing a practical and sustainable wellness and recovery action plan. It also misses the opportunity to incorporate the support offered by carers as part of a coordinated approach to care. People living with mental illness actively seek control over their health journey. Ignoring the need of clients to be active partners in care planning is disempowering to clients and hinders their recovery (Ehrlich et al. 2017).

Respect, Enhancing Autonomy, and a Partnership Approach to Recovery: Two Examples

An example of how respect for personal agency and autonomy has been integrated into recovery and care planning protocols can be found in the NSW Older Persons Community Model of Care (NSW Ministry of Health 2017b). This model provides a template and examples of a *Consumer Wellness Plan* which is developed jointly by the consumer, their carers, and the mental health worker. This approach is consistent with the Equally Well National Consensus Statement actions that:

> 'people living with mental illness be an active partner in ongoing individualised care. . .' and are 'at the centre of decisions about their care, together with their families and other support people.' (National Mental Health Commission 2016) (p.15)

In another example, a small NGO program considers a person's health across 13 domains of well-being. As part of this process, they seek and ask their clients about their life goals. In conjunction with other services, their family, and carers, they then develop a shared wellness and recovery action plan to help their clients achieve these goals. Many people, who had been long-term clients of mental health services, said this was the first time anyone had ever asked them about their life goals, let alone develop a plan to help them achieve these goals (Roberts and Burmeister 2018).

Ensuring Physical Health Screening, and Medical Interventions

> Four of every five mental health clients will have a mortality-related mental health condition. (Australian Institute of Health and Welfare 2017)

Screening

Ensuring regular screening for coexisting physical health conditions is perhaps the most important thing a mental health clinician should first do to improve the physical health their clients. If a clinician does not have the training to personally conduct a

comprehensive physical health examination, then they must ensure that this is carried out by a suitable health professional, usually a GP. One of the first questions a rural mental health clinician should ask is, “Have you had a complete physical health checkup during the last 12 months?” If the answer is “no,” it is important a comprehensive physical examination is arranged and conducted as soon as possible. Many of the causes of early death of people living with mental illness are avoidable (Australian Institute of Health and Welfare 2019), but, due to the lack of screening, people with mental illness live for years with chronic conditions such as respiratory disease, heart disease, and diabetes before they are diagnosed and treated. Without screening we cannot deliver targeted, effective preventive interventions or care.

Physical Health Conditions Cause Ten Times More Early Deaths than Suicide

During 2011–2012 the top nine causes of death resulted in 9502 people living with mental illness dying early; only 943 of these people died from suicide. Suicide risk assessment and screening is a routine, essential part of mental health care. This is a good and correct practice. Early death due to suicide is shocking and tragic, but early deaths due to physical health conditions are equally tragic. Ten times the number of people living with mental illness die prematurely as a result of preventable physical illness than of suicide (Australian Bureau of Statistics 2017). As such, physical health risk assessment and screening should also be a routine part of mental health care. Eighty percent of mental health clients will also have a mortality-related physical health condition (Australian Bureau of Statistics 2016) with 55% percent having three or more coexisting disorders (Australian Institute of Health and Welfare 2012). With four out of five mental health clients having a chronic physical illness, physical health screening must be a standard practice for all clients of mental health services.

Practically all Australian state and territory mental health services now have standard policies and guidelines for conducting comprehensive physical health assessments (NSW Ministry of Health 2017a). Many also have a 12-monthly physical examination for mental health clients as a key performance indicator. There are many other very good guidelines and algorithms readily available, some of which have been adopted by clinical teams across Australia and internationally (Curtis et al. 2011) and are available on the Equally Well website (www.equallywell.org.au). Ensuring that regular physical health screening occurs is a vital first step to preventing the early death of people living with mental illness.

From another perspective, improving physical health also significantly improves mental health. Poor health and associated functional disability is the largest contributor to poor mental health and psychological distress (Lorem et al. 2017; McNamara et al. 2018). Improving physical health has been shown to be one of the most effective ways to improve a client’s mental health and reduce suicidality (Fässberg et al. 2016; Fässberg et al. 2014; Lorem et al. 2017).

Support and Advocacy: For Physical Health Screening

It is not enough to simply advise a person living with mental illness to get a physical health checkup. People living with mental illness often delay seeking help due to

cost, stigma, or past negative experiences in GP waiting rooms (Lawrence and Kisely 2010). One Australian study revealed that although 87% of people with psychosis visited a GP within the last 12 months, two-thirds did not receive a general or cardiovascular health check (Morgan et al. 2011). In addition, when people are experiencing poor mental health, they can lack the motivation to attend to physical health concerns (Blanner Kristiansen et al. 2015). Finally, the number of GPs per 10,000 population in rural settings is only 63% of the number in capital cities (Australian Institute of Health and Welfare 2016; Roberts 2018). This makes it even more challenging to arrange and secure a GP for a full physical health checkup.

While many mental health workers do not have the training to conduct physical health assessments and do not see this as part of their role, they do have the skills to identify appropriate resources, arrange appointments, and, if necessary, follow-up treatment.

When people living with mental illness do secure an appointment, many GPs report a high level of nonattendance at these appointments. Nonattendance at appointments has compounding stigmatizing effects for people living with mental illness. Thus, achieving high rates of attendance at physical health checkups is vital to primary health care. Practices to ensure people living with mental illness turn up for appointments may include reminder SMSs or phone calls or arranging for someone to accompany the client to the appointment (such as a peer worker, a carer, friend, primary health-care worker, or allied health assistant). Securing a bulk-billed appointment also helps. Investing in the relationship with the GP, the client, and their supporters dramatically increases the effectiveness of these strategies. It is only through the support and advocacy of rural mental health workers that many people living with mental illness will be able to secure a comprehensive physical health examination.

Advocating for Quality Physical Health Care: "Don't Just Screen: Intervene!" Physical health treatment rates for people living with mental illness are 50% lower than for those with a physical illness alone (Royal Australian and New Zealand College of Psychiatrists 2015), and less than 50% of people with a severe mental illness have had a complete physical health examination in the past 12 months (Morgan et al. 2011).

When people living with mental illness do access physical health-care services, their physical health conditions are often overlooked or viewed as part of their mental health condition. This "diagnostic overshadowing" results in physical health conditions being undiagnosed and untreated and leads to avoidable early death (Rethink 2013). For many people living with mental illness even after screening and diagnosis, they are still denied access to effective interventions (Lawrence and Coghlan 2002). Generally, in Australia only about half of people living with mental illness with hypertension, diabetes, or high cholesterol use appropriate medication (Lawrence et al. 2000). As a group, people living with mental illness are disempowered and regularly suffer discrimination due to their mental health (see Fig. 3). Rural mental health clinicians must advocate to ensure their clients receive equal access to effective health-care interventions.

Rural mental health workers can and should **respectfully advocate for quality physical health care** for their clients. In fact, this may be the most important *mental health* intervention they do. As part of advocating for clients, mental health workers can also provide up-to-date information on the physical health risks for people living with mental illness to other health-care professionals. For instance, the highest absolute number of people with mental illness die early from cardiovascular disease and lung cancer (see Fig. 4). However, the highest relative risk of early death is from lower respiratory disease, breast cancer, and prostate cancer (see Fig. 2).

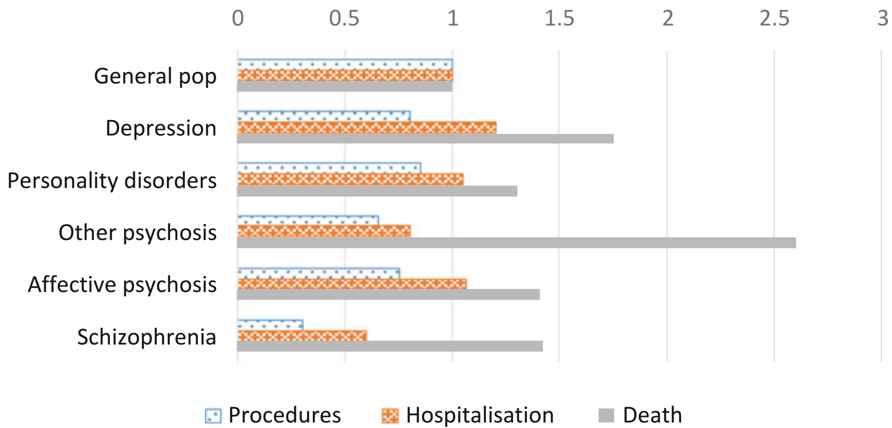

Fig. 3 Procedures, hospitalisations, and death rates for cardiovascular disease by diagnosis. (Lawrence and Coghlan 2002)

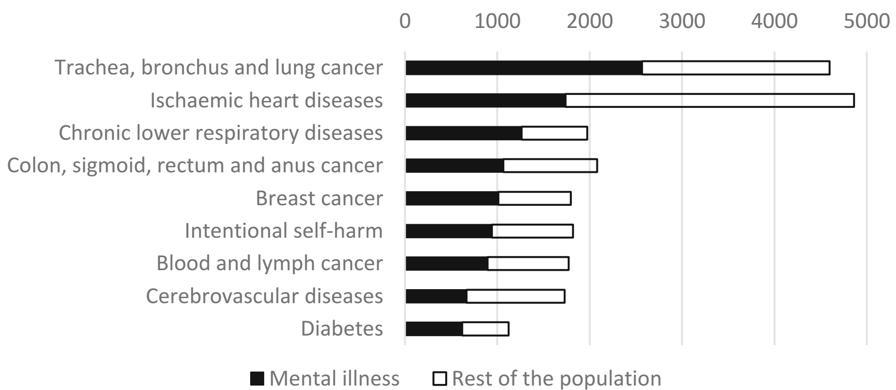

Fig. 4 Annual number of deaths in Australia by leading causes of death – ages 15–74. (Prorated and adapted from Australian Bureau of Statistics (2017) and Roberts (2019))

Addressing Key Lifestyle Factors

The previous section discussed the role of the rural mental health worker in the context of the available physical health-care services. This section focuses on direct actions the rural mental health worker should consider taking to improve the physical health of people living with mental illness. As with all care, this should be in undertaken conjunction with other medical and allied health professionals and supports available (see section "Using an Integrated Approach to Care"). Research combining the perspectives of patients and clinicians distilled a shared conceptualization of the causes of physical health problems (Blanner Kristiansen et al. 2015). The text in this section will follow the framework presented in the "lifestyle" textbox (Fig. 5). Failure to address these lifestyle issues (along with basic physical health screening and intervention) comprises a failure to provide quality care for clients.

Smoking Cessation

Smoking kills one in two heavy smokers (U.S. Department of Health and Human Services 2014). Helping someone with mental illness quit smoking may be the most impactful action a rural mental health worker takes. For every two people a rural mental health worker helps quit smoking, they will prevent one going to an early grave.

Smoking significantly increases the risk of heart disease, respiratory disease, cancer, and many other physical illnesses. For the 12 percent of the population with mental illness that accounts for 55% of early deaths due to cancer, smoking is probably the main cause (see Table 1). Further, the financial costs of smoking consume approximately one-fifth of the pension for smokers on the disability support pension in Australia (Access Economics 2007). Although people living with mental illness make up 12.9% of the population accessing MBS or PBS funded services, they comprise the majority of the premature deaths due to trachea, bronchus, and lung cancer and lower respiratory disease (see Fig. 4) (Australian Bureau of Statistics 2017).

Rural mental health workers are uniquely placed to advise, refer, and implement smoking cessation programs. However, a recent study found that while 80% of mental health-care professionals asked about smoking, only 45% advised clients to

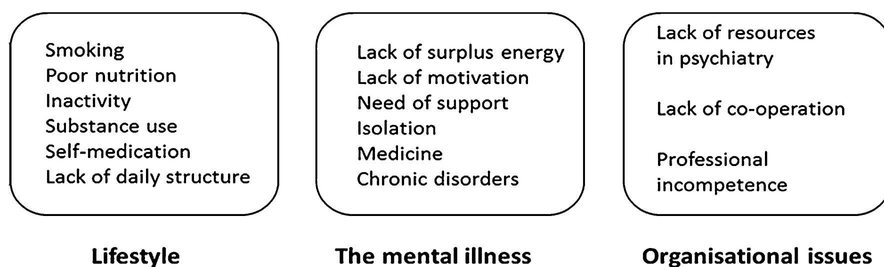

Fig. 5 Consumers' conceptualisation of the causes of physical health problems. (Blanner Kristiansen et al. 2015)

quit, and only a third referred to Quitline or offered cessation assistance (Sharma et al. 2017). This may be because most clinicians believe people living with mental illness are not interested in quitting. This belief has been supported by research and actions funded by the tobacco industry (Sheals et al. 2016). Nonetheless, motivation to quit is about the same as the general population (Ashton et al. 2010), and quit attempts are common (Stockings et al. 2012).

Rural mental health workers can also deliver evidence-based smoking cessation interventions within the context of usual treatment. Even a brief intervention may trigger a quit attempt and result in cessation, especially if it includes referral to evidence-based help. As a minimum rural mental health workers should:

Ask all clients: "Do you smoke (tobacco or anything else)?"

Advise: Seek permission to give advice about smoking and how it might be interacting with the presenting condition: "Stopping smoking improves mental health and well-being."

Help: Make an enthusiastic offer of help and provide self-help material, advice regarding pharmacotherapy, and offer referral to Quitline or a stop smoking specialist.

Poor Nutrition

Poor nutrition is a major contributor to the poor health of people with mental illness. Weight gain after the start of antipsychotic medication is usually rapid, averages 16 kg (Pérez-Iglesias et al. 2014), and can frequently be up to 50 kg (Maylea and Daya 2019). The impacts of this weight gain on everyday activities and self-esteem are enormous. Once body weight has increased significantly, it is extremely difficult and almost impossible to reverse without surgical intervention (Rosenbaum 2019). Thus, early intervention is absolutely critical. Working collaboratively with dieticians has been shown to improve intervention effectiveness, and rural mental health workers can support their clients through the challenges of reduced motivation, lack of attendance at appointments, and higher sedentariness.

Inactivity

The physical activity levels of people living with mental illness have been found to be much lower than the total population. Given the extreme challenges of clients losing weight after it has been gained, a key, achievable aim should be to increase physical activity. The goal of physical activity is to improve cardiovascular fitness. Even moderate increases in levels of physical activity have been shown to have demonstrable effects on cardiovascular fitness and thereby overall health (Rosenbaum 2019).

For everybody, motivation and ongoing participation are the crucial elements for the success or failure of exercise programs. Cost, ease of access, and lack of companionship are barriers to ongoing participation in physical exercise (Shor and

Shalev 2014). A key component of effective care planning is addressing and removing these barriers.

The rural context provides challenges and advantages in this respect. There may be a lack of free exercise classes and groups in the community, so finding low-cost or free programs that are easily accessible would help. The rural mental health worker could arrange for a carer, peer, or peer-worker to provide support, encouragement, or companionship. Finally, the use of a variety of support and motivational techniques such as reminder, encouragement, and congratulation SMSs and phone calls could also assist.

Working with the support of physiotherapists or exercise physiologists to help ensure that activity programs are suitable and well-designed and with the support of psychologists to help design motivational methods is another way the rural mental health worker can make a difference. In many rural communities, finding and engaging professionals from these disciplines is often difficult and may require the use of visiting professionals. Nonetheless, this is a key role and function the rural mental health worker should fulfill.

Physical exercise improves mental health. In addition to improving physical health, there is strong research indicating the beneficial effects of exercise on mental health. Systematic reviews and meta-analyses indicate that exercise significantly improves mental health (Vancampfort et al. 2015). A recent meta-analysis showed exercise to be an efficacious treatment for depression, equal to medication, or cognitive behavior therapy, and it should be an essential and standard part (step zero) of treatment for depression (Schuch et al. 2016).

Substance Use

Alcohol has been linked with numerous medical conditions. Alcohol misuse has been found to be the condition associated with the highest risk of premature mortality, and individuals with coexisting mental health and addiction have poorer health outcomes than people living with mental illness alone (Erlangsen et al. 2017). Alcohol misuse is a common presentation in clinical practice. Twelve-month DSM-5 prevalence rates are 17% for men and 10% for women (Grant et al. 2015). There are treatments with strong evidence of efficacy (Connor et al. 2016; Kavanagh et al. 2014). However, diagnosis and treatment are delayed an average of 18 years after onset (Chapman et al. 2015). Early screening and intervention are vital.

It is important that rural mental health workers routinely screen and assess substance use and other addictive behaviors. There are several screening tools that are available online, including the AUDIT (Alcohol Use Disorders Identification Test) and the DAST (Drug Abuse Screening Test) which can help identify substance use issues. If problematic substance use is occurring, evidence-based interventions and strategies should be implemented. People with a dual mental illness-substance abuse diagnosis experience additional barriers accessing services. Integrated care is important in treating people with a dual diagnosis. Both of these issues will be addressed later.

Medication

The side effects of antipsychotic medication are well-established. "People living with mental illness have a much higher risk of developing metabolic syndrome. Steps should be taken to limit the side-effects such as obesity, cardiovascular disease and diabetes" (National Mental Health Commission 2016) (p. 18). It is not uncommon for people living with mental illness to gain 50 kg in the 36 months after starting antipsychotic medication (Maylea and Daya 2019). The impact of this weight gain on activities of daily living, physical health, and mental health is profound.

The other challenge often facing people living with mental illness in rural communities is overmedication and polypharmacy. There are many reasons for this, including a lack of continuity of care due to contact with multiple, different prescribers, and overprescribing to manage risk in small communities (which have limited after-hour support services). Engaging public and community pharmacists in regular medication reviews is an achievable, tangible action that can significantly reduce unwanted side effects and dramatically improve a client's quality of life.

Thus, rural mental health workers should ask about medications, including when clients began taking them. Effectively managing diet and physical activity is vital to limiting and preventing the side effects, polypharmacy, overprescribing, and weight gain associated with many antipsychotic medications. Requesting the local GP to conduct a thorough medication review is another action that can help.

Daily Structure and Social Participation

Low levels of participation in work and social engagement are both a cause and symptom of poor mental health and poor physical health (Ewart et al. 2017; Shor and Roelfs 2015). Not only is it related to poor mental health, it is also strongly correlated with poor physical health. Low levels of community engagement, social disadvantage, and workforce participation are all strongly related to increased risk of early death for people living with mental illness (see Fig. 6) (Australian Bureau of

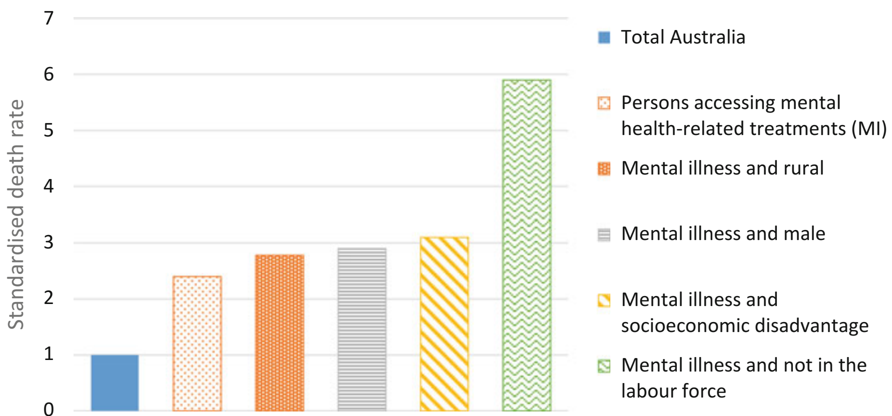

Fig. 6 Risk of early death by population group. (Australian Bureau of Statistics 2017)

Statistics 2017; Holt-Lunstad et al. 2010). Reviews have revealed the profound influence of social isolation and loneliness on mental health (Shor and Roelfs 2015; White et al. 2019). While people living with mental illness already have 2.5 times the base population rate of premature death, for those also of low SES or not in the workforce, this rate increases to 3 and 6 times that of the total population, respectively (see Fig. 3) (Roberts 2019). This data underscores the importance of setting social engagement goals and working with clients to help them achieve these goals (Roberts and Burmeister 2018). Strong social support networks are key correlates of mental health (White et al. 2019).

Using an Integrated Approach to Care

The overall focus of this chapter is on improving the physical health of people living with mental illness. However, other domains of life also contribute to recovery, wellness, and physical health. Ensuring secure and stable housing and accommodation and living in a safe environment free from harassment, violence, and other forms of abuse are foundation stones of well-being. A holistic approach to care should also address diet, exercise, and addiction. Social inclusion and community participation are also predictors of physical and mental well-being. People living with mental illness who are not employed have six times the rate of premature death compared to those in full-time employment (Roberts et al. 2018), and social isolation and loneliness are major predictors of mental illness and mortality risk (Holt-Lunstad et al. 2010; Shor and Roelfs 2015). Therefore, comprehensive, effect mental health care, and recovery planning must encompass all the domains affecting mental and physical health.

The best way to ensure effective and comprehensive care is through an integrated approach to care (Roberts et al. 2016). Integration is often poorly understood and conceptualized. Integrated care can occur horizontally, vertically, and across other dimensions (Roberts et al. 2017).

Horizontal Integration

Horizontal integration means integrating care across the various domains of health and well-being (see Fig. 7). As demonstrated earlier in this chapter, the elements of effective mental health care include social participation and work; reducing discrimination, exercise, and nutrition; and maintaining good physical health. When a mental health worker ignores these domains, they are depriving their clients of evidence-based, comprehensive mental health care. Effectively coordinating care across the domains of mental health and physical well-being is horizontal integration.

Rural mental health workers are usually well-connected with other health and human service professionals in their region, and there are frequent local networking opportunities. An integrated care and comprehensive and holistic approach to recovery are easier when clinicians are already part of the same social and professional network. On the other hand, rural communities often suffer a lack of services and have fewer service options across the domains of mental health and well-being (see Fig. 7). The rural mental health worker, while not responsible for providing each

Fig. 7 Elements of horizontal integration. (From Nursing Midwifery and Allied Health Professions Policy Unit (2016))

component of holistic care, does have a responsibility to help access and integrate care across each of these domains to ensure a coordinated approach to holistic care. This may involve identifying and sourcing options in creative ways to enable access to tele-video services.

In practice, this means an appreciation of the complex interaction of various life domains on mental health and ensuring that the client's well-being is assessed and managed across each of these domains. As such, good mental health care and recovery planning should consider and incorporate each of the domains in Fig. 7. There are various assessment tools to enable the mental health worker to systematically assess and address these domains (Centre for Disability Studies 2005). Each client's wellness and recovery plan (and the client's clinical file) should show evidence of assessment and consideration across each of the domains of mental health and physical well-being.

The rural mental health worker can also demonstrate leadership by convening meetings of local health and human service workers to develop a shared wellness and recovery action plan for their clients (Roberts and Burmeister 2018) on a case-

by-case basis. These plans help the local services to work as a coordinated team to support the journey of recovery across the domains of recovery (see Fig. 7).

Vertical Integration and Stepped Care

Vertical integration is the extent to which services are coordinated up and down the spectrum of care (see Fig. 8). A person's mental illness and recovery journey may see them move between early signs of distress, initial symptoms, illness, severe functional impairment, hospitalization, and recovery (Roberts 2019). In the process they may have contact with primary health care and secondary (community-based) and tertiary (inpatient or intensive) care. One of the main challenges for people living with mental illness in rural communities (where there can be a lack of services) is first accessing the right level of care and then moving between levels of care and, in the process, not getting lost between these steps. This is even more important when transitions in care levels may involve a transfer between different towns, away from family and existing community supports.

Coordinating care up and down through primary, secondary, and tertiary care as a person's mental health improves or deteriorates is a key role for a rural mental health worker. It is a time of high risk (Peterson et al. 2007), and clients "falling between the cracks" is a common experience and expression. Examples of this include a when a person is discharged from an inpatient unit without their local mental health worker being notified.

Ideally people should move seamlessly up and down the levels (or steps) of care. Unfortunately this is often not the case. The Australian government has committed to a stepped care approach (Department of Health 2015; Integrated Regional Planning Working Group 2018). In this approach a person enters contact with services at the appropriate level and then "steps up" or "steps down" according to the severity of the mental illness. The rural mental health worker can facilitate vertical integration by proactively following their client up and down the different levels of care. The "good shepherd" model involves maintaining full and ongoing communication and advocacy as the client moves between the levels of care. This requires regular and proactive follow-up (good shepherding) by the rural mental health worker, sometimes to a distant mental health inpatient unit, to ensure good discharge planning and communication.

Other Dimensions of Integrated Care

Integration can also occur at the local community level, where the partner agencies put in place systems and arrangements to facilitate collaboration and coordination. At the system level, vertical integration requires collaboration (enhanced communication and referral, care coordination) and agreed protocols. These arrangements can be modest or extensive. In rural clinical practice, this can range from light (informal local service network meetings) to moderate (shared referral and intake forms, service level agreements) through extensive integration (joint funding, joint positions, joint clinical governance, and fully integrated services) (Fuller et al. 2011; O'Flynn 2009). The degree, depth, or extent of collaboration is another dimension of integrated care.

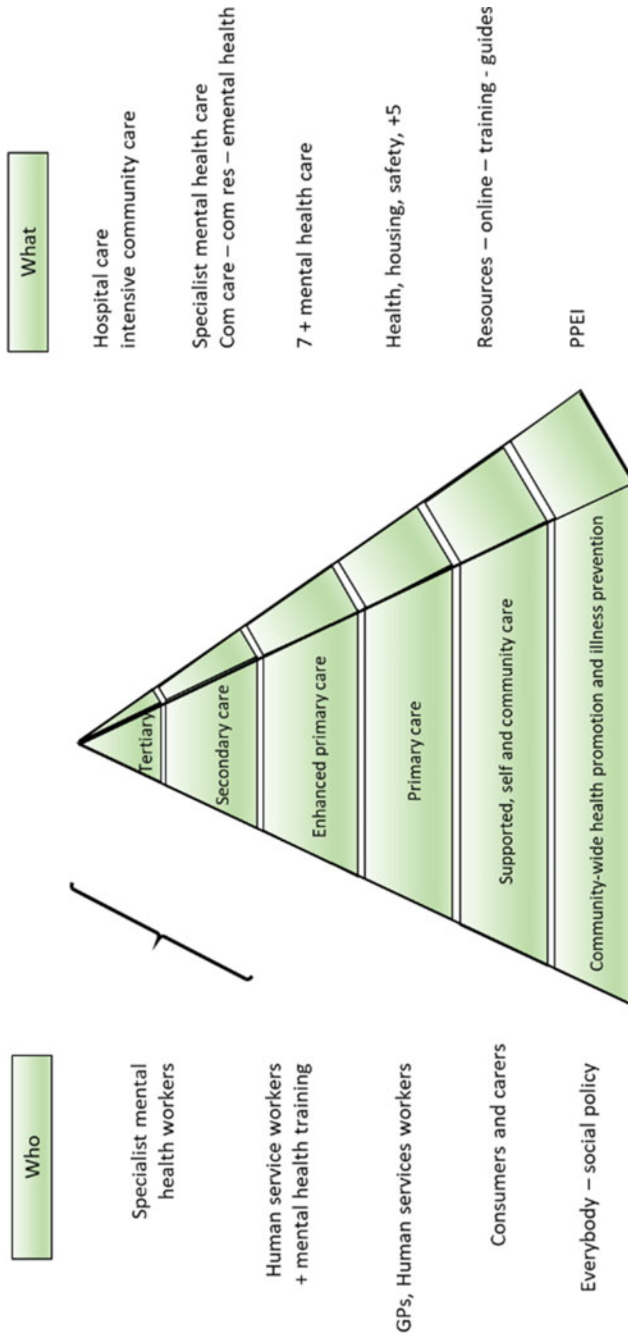

Fig. 8 Elements of a stepped mental health-care model. (Roberts et al. 2017)

Integration is also a progressive process that occurs over time. The initial communication, the development of trust, joint planning, development of local collaborative activities, and partnerships all take time (Roberts et al. 2017). Over time, successful partnerships mature and strengthen.

Both of the above forms of integration are more pertinent to service managers and planners and will not be discussed in detail here. Case examples of system changes to improve integrated care at the community level are presented in the text boxes.

Concluding Comments and Recommendations

People living with mental illness have much poorer health and die on average 20 years earlier than the rest of the population. Each year ten times more people living with mental illness die prematurely due to avoidable physical illness than complete suicide. This chapter has outlined several actions that rural mental health workers can readily implement that will have a profound impact on the quality of life of their clients. These actions will help enhance the physical health of people living with mental illness.

The physical health of people living with mental illness has been made a priority in Australia and many other countries. The current poor health and early death of people living with mental illness is simply unacceptable. Improving physical health improves mental health, the quality of life, and social participation. Improving a client's physical health will add years and perhaps decades to their longevity. In the context of existing workforce challenges (Roberts and Maylea 2019), rural mental health workers need to work together to help redress and reverse the national scandal of people living with mental illness needlessly suffering poor health and dying prematurely. People living with mental illness have the right to equal quality of life and equality in life.

Working in rural mental health has its challenges and opportunities. Generally professionals in rural communities are better networked and connected. On the other hand, there are fewer services, and this is made more difficult with the allied health, nursing, and medical workforce and shortages in rural communities which result in high levels of "churn," fly-in fly-out services (Perkins et al. 2006) and extended vacancies in key positions. These challenges require a greater attention to partnership-focused activity (Jackson et al. 2019). Partnering and care coordination skills are not taught in most universities but are vital for effective integrated care. Using an integrated care model requires frequent, repeated contact and communication with other health and human service professionals. This is a strength of rural settings. There are several actions rural mental health workers can readily enact to enhance individual care and local service collaboration. Together, we can make a difference.

Key Points for Effective Practice

- Preventable physical illness leads to one person with mental illness dying (prematurely) every hour of every day in Australia.
- Adopting a human rights-based approach to care will help address stigma and equal access to quality health care for people with mental illness.
- People living with mental illness are at greater risk of premature death and poor physical health due to:
  - Stigma and discrimination
  - Lack of basic physical health screening
  - Smoking
  - Poor nutrition and lack of physical activity
  - Polypharmacy and the side effects of medication
  - Low levels of social participation
- Mental health clinicians are also primary health-care clinicians and are ideally placed to take action to improve the physical health of people living with mental illness.
- An integrated care approach is vital.

Checklist: Ten Evidence-Based Actions to Improve the Physical Health of People Living with Mental Illness (in Order of Priority)

People living with mental illness have a very high risk of poor health and dying early due to preventable chronic physical health conditions. These conditions also impact negatively on their mental health. The following ten actions are probably the most important things to do to improve the mental health and physical well-being of your clients.

1. Ensure comprehensive physical health checkups every 6/12 months.
2. Follow-up to **ensure** appropriate treatment is being offered.
3. Encourage smoking cessation and offer support to quit.
4. Arrange medication review (with a pharmacist if possible).
5. Strongly encourage, arrange, and support participation in regular physical activity.
6. Pay attention to good diet (with a dietician and psychologist if possible).
7. Assess and address alcohol and illicit drug misuse.
8. Support employment, social connection, and community participation.
9. Ensure secure housing and personal safety.
10. Take an active role in coordinating and integrating care.

In each of the above actions, the advocacy of the rural mental health worker is vital to ensure the client gets fair access to this support. You may be the only person able and available to do this. Based on current research, without advocacy, it is unlikely your client will get equal access to these potentially life-saving services.

Case Studies

Case Study 1. Mental Health Clinic in a GP Practice

In Mudgee, NSW, a local health team with the support of their executive director set up a regular weekly clinic at a local general practice. In this service the GP booked out one morning a fortnight to see clients of the public mental health service. The appointments and clients' attendance were organized by mental health workers to ensure all appointment times were used. Evaluations showed this straightforward, local arrangement was highly regarded by the consumers, carers, the mental health workers, GPs, and reception staff. Most importantly, it improved the physical health and mental health of the clients, resulting in a dramatic decrease in hospital admissions. This program has been running for more than 10 years across successive GPs. It required no additional funding or staffing, proving this approach is sustainable, provided it is supported by existing local mental health staff (Fitzpatrick et al. 2018; Perkins et al. 2010). It is an example of how local partnerships and coordination can lead to dramatic improvements in care and outcomes, with little additional effort and no additional costs.

Case Study 2. MOU with an Aboriginal Community Controlled Health Service

In Broken Hill, NSW, three specialist mental health workers have been placed in an Aboriginal community-controlled primary health-care organization. Supported by a memorandum of understanding (MOU), the mental health workers, who are employed by NSW Health, are placed, managed, and governed by the Aboriginal Health Corporation. In this way, the delivery of mental health services is totally integrated with a primary health-care service and governed by the Aboriginal community board, but maintains close links with existing local mainstream public health services. The service has a holistic approach to health and social-emotional well-being, with good capacity in physical health-care provision. Although based at the Aboriginal primary health-care organization, the mental health workers fully participate in the clinical governance process of the state mental health service, such as case allocation, clinical review, case presentations, clinical supervision, and professional development. Running for more than 15 years, this model has been cited as an exemplar in culturally appropriate cooperation between Aboriginal health and mainstream mental health services (Ridgeway, 2004). This model allows for the provision of comprehensive care, including complete physical health checkups. It also coordinates changes in the level of care, supporting clients when they need to "step up" or "step down" during their recovery journey.

Case Study 3. NGO Innovation
A small/medium nongovernment mental health organization has deployed one of its staff to be a specialist primary (physical health) care nurse. This staff member conducts basic physical examinations, arranges GP appointments, and ensures necessary follow-up treatment is conducted. This simple change has transformed the practice of this team and resulted in dramatic improvements in the physical health of the clients of the service. All clients now have a regular comprehensive physical health examination and any needed follow-up treatment.

This arrangement has changed clients' lives. For example, the primary care nurse observed a female client who was losing her hair. This, in fact, had been occurring for some years. The nurse was concerned that this may indicate the presence of cancer and arranged the necessary screening and assessment. After a thorough investigation, it was discovered that the client was chronically severely malnourished. Working closely with a dietician, this has been addressed, and the client's physical health and mental well-being has improved dramatically. Before the introduction of the physical health nurse, this basic health condition had gone unrecognized for years.

Cross-References

- ► Funding
- ► General Practitioners
- ► Multidisciplinary Teams in Rural and Remote Health
- ► Primary Care in Rural and Remote Contexts
- ► Promotion and Prevention of Mental Health Problems in Rural and Remote Context
- ► Suicide and Self Harm

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