BEING EQUALLY WELL

BETTER PHYSICAL HEALTH CARE AND LONGER LIVES FOR PEOPLE LIVING WITH SERIOUS MENTAL ILLNESS

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ABOUT THE PROJECT

This has been a collaborative project between the Mitchell Institute at Victoria University, the Australian Health Policy Collaboration and Equally Well Australia to answer the question: '*What needs to change at the front lines of clinical care and how can the changes be supported?*' to reduce the premature mortality and high rates of poor physical health of people living with serious mental illness.

ABOUT US

The Mitchell Institute for Education and Health Policy at Victoria University is one of the country's leading education and health policy think tanks and trusted thought leaders. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Australian Health Policy Collaboration is led by the Mitchell Institute at Victoria University and brings together leading health organisations and chronic disease experts to translate rigorous research into good policy. The national collaboration has developed health targets and indicators for preventable chronic diseases designed to contribute to reducing the health impacts of chronic conditions on the Australian population.

Using a collective impact approach Equally Well Australia brings together more than 90 organisations who are committed to make improving the physical health of people living with mental illness a priority at all levels: national, state and territory, and regional. Supported by the National Mental Health Commission, Equally Well Australia undertook an extensive consultation process to develop the Equally Well National Consensus Statement. Launched in July 2017, implementing the actions of the Equally Well Consensus Statement has become a priority action of The Fifth National Mental Health and Suicide Prevention Plan, and a priority reform and 'start now' reform of the Productivity Commission Mental Health Inquiry report.

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FOREWORD

Improving the physical health of people living with a mental illness may be one of the most achievable and significant reforms confronting the Australian health system. The Australian Health Policy Collaboration (AHPC) and Equally Well Australia (EWA) have been collaborating through 2019–2021 to develop evidence-based policy proposals and practice actions that will improve the physical health care of people with mental health conditions.

In October 2019, a National Symposium hosted by the Mitchell Institute and Equally Well Australia brought together leading health researchers and health professionals to identify the evidence-based interventions that would improve the physical health of people living with mental health conditions. Subsequent to that symposium, the collaboration has supported an intensive project, led by the Mitchell Institute, on how to improve the clinical care of people living with serious mental illness. While recognising the importance of social determinants, stigma, discrimination and power inequities as key determinants of health, this project has focused on the role of general practices and mental health services in implementation of evidence-based interventions and continuous improvement. It outlines the outcomes of the project and presents an evidence-based strategy for enhanced clinical care to achieve better health and a longer lifespan for people who live with serious mental illness.

The AHPC is supported by the Mitchell Institute, Victoria University and is a national collaborating network of clinical, academic and professional experts and organisations to translate evidence to inform and influence health policies and services. The national collaboration curates evidence to inform policy information and advice relevant to the prevention and reduction of chronic diseases in the population. Equally Well Australia was established by the National Mental Health Commission to lead a collaborative national endeavour to improve the quality of life of people living with mental illness and work towards equality in health care and health outcomes. EWA is now supported by the Commonwealth Department of Health to continue this work, developing resources, facilitating collaboration and measuring progress towards improving the physical health of people living with mental illness.

Achieving the level of system change that is required to reduce the higher rate of premature mortality for people with serious mental health conditions requires significant policy and practice attention and effort.

The evidence presented in this report highlights the urgent need to invest in physical health care at the points of contact with health care that are critical to the needs of people living with a mental health condition. It is also evident that such care needs to reach out to and support people with serious mental illness to build their confidence and trust in healthcare services and professionals.

That is a challenge that requires a comprehensive and practical approach to supporting and resourcing clinicians in their day-to-day interactions with individual consumers and to enabling these interactions to be of consistent quality and continuity for people who live with ongoing mental health conditions.

A contemporaneous relationship with both mental and physical health clinicians and providers is fundamental for people living with serious mental illness, if they are to be provided with the opportunity to live with optimal physical health and with equal opportunity and equal life span expectations as their peers in the wider population.

It is the challenge that the collaboration between Equally Well Australia and the Australian Health Policy Collaboration network, led by the Mitchell Institute, has set out to address.

This project brings together the knowledge of consumers and carers, and of mental health and primary care professionals to strengthen prevention, treatment, care and support. The project set out to ensure that the relationship between consumers and their health professionals was at the centre of this project alongside a focus on clarifying the professional roles and relationships of the medical and other health professionals that are central to the physical health care of people with serious mental illness.

Our approach was in response to the very obvious challenge that the outcomes of our healthcare system (the macrosystem) for people living with serious mental health conditions can be no better than the mesosystem (specialist and primary care and supporting service structures) and smaller service level (microsystem) components of healthcare of which it is composed. For physical health care, that is the primary health care system level and the role of general practice in particular.

This technical report presents evidence-based and practical changes that have been identified collaboratively by the experts involved in this work. The report details the proposed systematic and systemic changes in policy and practice to deliver better physical health care for people living with serious mental illness, and to do so within the existing health services infrastructure. The report provides evidence that supports these recommendations and is a resource for all who are working to reduce this stark health divide.

The accompanying *National Policy Roadmap to Being Equally Well* (the *Roadmap*) provides practitioners, service providers, health service system supporting agencies, funders and policy-makers with a summary of the suite of changes proposed, changes that are evidence-based, implementable and affordable.

Whilst this collaboration has focused on improving the physical health care and life expectancy for people living with serious mental illness, we and our collaborators in this work intend that this work should inform and influence the physical health care of all who live with mental illness.

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GLOSSARY OF TERMS

aCVR: absolute Cardio Vascular Risk assessment.

HbA1c: a blood test used to help diagnose and monitor people with diabetes.

CVD: cardiovascular disease.

Chronic physical diseases: Chronic physical diseases (also referred to as non-communicable diseases or long-term conditions) include a range of conditions that are non-infectious, long-lasting, and diminish health status due to disease symptoms, functional impairment and disability, and can reduce healthy life expectancy and cause premature deaths.

Clinical Quality Registry (CQR): are datasets that draw from existing health care data sources and platforms and are designed to report timely, actionable and risk-adjusted benchmarked data back to clinicians, health providers and other stakeholders for the purposes of quality improvement.

Clinical microsystems: are the small, functional front line units that provide most healthcare to most people. For this project they are described as follows:

- **Micro-system:** the teams at the front lines of care where patients and their families meet the health system. These teams include General Practice, acute and community mental health services.

- **Meso-system:** Primary Health Networks (PHNs), Local Health Networks/Districts (LHN/Ds), professional and industrial bodies.
- **Macro-system:** federal, state and territory governments; NMHC, AHMAC, private health insurance.

General Practice Registers: are a dedicated register and recall system for people with specific health conditions needing ongoing monitoring and support.

Local Health Networks/Districts (LHN/Ds): are independent organisations that directly manage groups of public hospital services and their budgets and are directly responsible for hospital performance (Australian Institute of Health Welfare, 2021).

Medicare Benefits Schedule (MBS): MBS is a listing of the Medicare services (subsidised treatment by health professionals, such as doctors, specialists, optometrists and, in specific circumstances, dentists and other allied health professionals).

Mental and physical comorbidity: Is defined by the presence of at least one diagnosed mental health condition and one or more physical health conditions.

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Multimorbidity/comorbidity: Multimorbidities are a growing concern worldwide, driven by population ageing and improvement of public health leading to lower mortality rates (United Nations, 2017). Multimorbidity is commonly defined as the presence of two or more chronic medical conditions in an individual (Fortin et al., 2007). However, multimorbidity has no single definition and is often given other names, including comorbidity and multiple morbidity. For the purpose of this paper, multimorbidity and comorbidity are used interchangeably.

Pharmaceutical Benefits Schedule (PBS): PBS is a list of medicines subsidised by the Australian Government.

Primary Health Networks (PHNs): 31 PHNs are independent primary health care organisations throughout Australia that commission services and support to primary health care and general practice (Commonwealth of Australia, 2018).

Primary Care Practices: principally general practices that are the entry point into the health care system that include care by general practitioners and can include nursing care, allied health care, midwifery, pharmacy, dental and Aboriginal health care (Commonwealth of Australia, 2018).

Serious/severe mental health conditions: the terms serious mental health conditions and serious mental illness are predominantly used in this paper. Severe mental illness is the term used in some working group reports and whenever the reported discussion is drawn from a referenced report or publication. The project working definition of serious mental illness has included conditions requiring antipsychotic therapy, those requiring shared care provided between psychiatrists and GPs and thought disorder conditions rather than neuroses.

Thematic analysis: a methodology that provides a rigorous and transparent process to identify the themes emerging and consolidating through the project process.

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INTRODUCTION

The problem of poor physical health and premature mortality for people living with mental illness exists globally.

The World Health Organization (WHO) in 2018 produced international guidelines for the physical health care of people living with serious mental illness recognising that people with serious mental illness have "a two to three times higher average mortality compared to the general population, which translates to a 10-20 year reduction in life expectancy… (with) …the majority of deaths amongst people with serious mental illness (-) attributable to physical health conditions" (World Health Organization, 2018).

A recent comprehensive publication by the Lancet Psychiatry Commission summarised the issue as:

The high rate of physical comorbidity, which often has poor clinical management, drastically reduces life expectancy for people with mental illness, and also increases the personal, social and economic burden of mental illness across the lifespan.

The Lancet Commission objective was to summarise advances in understanding of the problem of poor physical health in people with mental illness, and to "present clear directions for health promotion, clinical care and future research". An extensive body of meta-research affirmed that the most common physical health conditions associated with mental illnesses are cardio-metabolic diseases and conditions, and that the risk of obesity, diabetes and cardiovascular diseases is between 1.4 to twice as high as in the general population (Firth et al., 2019).

In the Australian context, considerable effort has been made through recent years to improve the physical health of people living with mental illness. In 2015 and 2016, the Royal Australian and New Zealand College of Psychiatrists published a series of reports that examined barriers to health care for people living with both mental and physical health conditions and outlined what could be done to reduce these. The 2015 report noted the extensive international evidence of the higher rates of physical illness among people with serious mental illness.

The report highlighted the complex factors in health care that contribute to the poor health outcomes for people with serious mental health conditions:

The health system is fragmented and frequently unaffordable with a lack of integration between physical and mental health care.

Frequently, people with both serious mental and physical illness fall through the gaps between physical and mental health systems.

When consumers with mental illness report physical health symptoms, all too often they are not addressed because clinicians focus on mental illness to the exclusion of other health problems or symptoms, a phenomenon called 'diagnostic overshadowing'.

Furthermore some psychiatrists and others working in the mental health field do not recognise the treatment of physical symptoms as a key part of their role. Conversely, other doctors and clinicians don't feel confident to manage physical health problems in people with mental illness. The result is that this group can miss out on essential services altogether

The Royal Australian and New Zealand College of Psychiatrists, 2015.

A 2016 report for the RANZCP said that the lifespan gap for this population group:

represents a failure of health policy and practice – and presents a substantial challenge for both policy makers and health care providers.

That report assessed the economic cost of concurrent physical and mental health comorbidities as at least $15 billion annually in Australia (The Royal Australian and New Zealand College of Psychiatrists, 2016).

Equally Well Australia (EWA) was established in 2017 to lead and support collaborative work nationwide to make the physical health of people living with mental illness a priority at all levels: national, state and territory, and regional. Supported by the National Mental Health Commission, EWA is a collective representing consumers, carers, professional colleges,

Aboriginal and Torres Strait Islander organisations, Primary Health Networks (PHNs), peak bodies, community managed organisations, private health providers, non-government organisations and governments.

The Equally Well National Consensus Statement 2016 (National Mental Health Commission, 2016) provides guidance to health service organisations on what is required to provide health care that is safe, collaborative and effective in recognizing and responding to the health needs of people with serious mental illness. The Statement was supported by the National Mental Health Commission. Subsequently, the Fifth National Mental Health and Suicide Prevention Plan (Commonwealth of Australia, 2017) cited the Consensus Statement as strong guidance for how governments "can work together to better address the physical health of people living with mental illness".

The Plan states that:

systems are needed to measure continuity of care between primary care and specialist services, the quality of physical health care for people with severe and complex mental illness, and experiences of stigma or discrimination in general health settings. Better information is needed on the full range of clinical and community supports which underpin a connected and contributing life. New data collections established by PHNs and the NDIS may allow development of additional indicators on these issues, and priority will be given to ensuring that these collections align with existing state and territory data collections.

The Australian Institute of Health and Welfare has provided a summary of data and international evidence on the physical health of people living with mental illnesses in the national report Australia's Health 2020 (Australian Institute of Health Welfare, 2020). AIHW notes the lack of a national data set on the physical health of people living with mental illness and the lack of consistency in data collected across jurisdictions and different health settings.

The Productivity Commission undertook an inquiry during 2018-20 into the role of mental health in supporting economic participation, enhancing productivity and economic growth. The Inquiry was asked to make recommendations, as necessary,

to improve population mental health, so as to realise economic and social participation and productivity benefits over the long term.

The Commission's final report in June 2020 included in its priority recommendations that: "Australian State and Territory Governments should agree to an explicit target to reduce the gap in life expectancy between people with severe mental illness and the general population, and develop a clear implementation plan with annual reporting against the agreed target" (Productivity Commission, 2020, p. 73).

Additional ('start now') reforms to be considered include "all governments should implement all the actions in the Equally Well Consensus Statement, including releasing clear statements covering how they intend to implement the initiatives, including time frames and outcomes against which progress can be measured" and "that the National Mental Health Commission should report annually on Australian, State and Territory Governments" progress in implementing the Equally Well Consensus Statement. (Action 14.1).

The Commission began its recommendations with the statement that:

The needs, preferences and aspirations of the people who use the system, as well as their families and carers, should shape all parts of a person-centred system — from the work of the individual clinician to the policies proposed by decision makers — to create recovery-oriented services and supports (Productivity Commission, 2020, p. 63).

More recently, the Royal Commission into Victoria's Mental Health System (State of Victoria, February 2021) found that physical and mental health services are poorly integrated for people living with mental illness. The Royal Commission report recommends a "responsive and integrated system with community at its heart" through six levels of service provision – from services for the largest number of people with mental health needs through to statewide services for the smallest number of people with needs. Each level is to work with the others providing integrated services and integrated support for individuals. The role of primary physical health care is identified – and integration will require system linkages between Commonwealth government subsidized primary health care services and state funded mental health services.

This recent history indicates that the need to do better is well recognized. Through the 5th National Mental Health Plan, Australian Governments have a shared aim to achieve system changes to support better physical health outcomes for those with mental illness. To do so requires strategies and structures that address the reasons why people living with serious mental health conditions die prematurely and have poorer physical health compared to the general population. There are barriers to accessing appropriate healthcare for people living with mental illness and their carers; there are barriers that confront health care providers including information barriers, resource insufficiency, resource distribution, resource inflexibility and timing (Knapp et al., 2006). Contributing factors to these barriers for both consumers and healthcare providers include payment systems that rely on fees for services and effectively limit the potential for care to be planned and managed over time. Payment systems that are focused on single points of contact inhibit the capacity of health service providers to focus on prevention of deterioration and crisis. The 'system' is based on supply rather than demand, with poor integration and poor accountability for quality and safe health care for people with significant mental health needs (Duggan et al., 2020).

Without a systematic strategy aimed at prevention, early risk management and long term integration of health care of coexisting physical and mental health conditions, the current rates of premature mortality for people living with serious mental illness will be likely to continue unchecked, representing a scandalous failure of health care in Australia; an unacceptable level of harm to vulnerable individuals and preventable adverse impacts on health expenditure and the broader economy.

How can we do better?

There have been successive initiatives at differing levels of health care service provision that have aimed at improved health outcomes for individuals through system redesign, quality improvement and data utilisation. None has achieved widespread implementation and the poorer health status and life span gap for people with serious mental illness

is persistent. Policies often fail at implementation as a top-down approach does not provide for front line staff engagement and ownership. In a federated nation, local area and even state level initiatives may deliver improvements without influencing other similar services elsewhere, and many such initiatives, if not built from within the infrastructure at all levels of the service system, can atrophy as leadership, priorities and pressures shift.

In October 2019, a national symposium hosted by the Australian Health Policy Collaboration (AHPC)[1] and Equally Well Australia (EWA)[2], brought together academic experts and leading health professionals to identify the evidence-based interventions that would improve the physical health of people with mental health conditions.

This work follows on from that symposium and has been an interdisciplinary collaboration to develop policy and practice actions that are evidence-based, implementable and affordable.

The project reports

There are two reports from this work. The technical report, of which this is Volume 1, presents the comprehensive, evidence-based and practical changes that have been identified by multi-disciplinary experts involved in this work. It details systematic changes in policy and practice that are designed to deliver better physical health care for individuals, and to do so within the existing health services infrastructure. Volume 2 provides appendices presenting the data and evidence that has informed much of the work reflected in the technical report.

A second report, the *National Policy Roadmap to Being Equally Well* (the *Roadmap*) provides practitioners, service providers, health service system supporting agencies, funders and policy-makers with a summary of the suite of changes proposed, changes that are evidence-based, implementable and affordable.

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1 A national network of health organisations, health professionals and academic experts working to provide policy leadership on strategies to reduce preventable chronic disease in the Australian population. The Collaboration is supported by the Mitchell Institute, Victoria University, and the Australian Government Department of Health.

2 Equally Well is a collaborative network established to support those with mental illness to live longer and have a good quality of life. Equally Well is supported by the National Mental Health Commission and provides resources that have been collected, collated and curated to assist consumers, carers, professionals and service providers.

THE HEALTH CARE CHALLENGE

There is an overwhelming body of evidence demonstrating the poor health outcomes for people living with mental illness.

Life expectancy is shortened by up to 30% for people with serious mental illness compared with the general population. This equates to a life expectancy of between 50-59 years. There is evidence that this gap is widening for both men and women. Suicide accounts for some of these premature deaths (Australian Institute of Health Welfare, 2020) but between 80% and 95% of the causes of early death relate to physical illnesses such as cardiovascular disease, respiratory illnesses, diabetes, and cancer (Australian Bureau of Statistics, 2017; Roberts, 2019) (Appendix A: Volume 2; p.7).

People with a serious mental illness are:

- **Six times** more likely to die from cardiovascular disease
- **Five times** more likely to smoke
- **Four times** more likely to die from respiratory disease
- **Likely to die** between 14 years and 23 years earlier than the general population and account for approximately one-third of all avoidable deaths

(National Mental Health Commission, 2016)

Mental illnesses in interaction with other chronic diseases (comorbidities) represent one of the biggest challenges to public health systems in Australia.

About 12% of the Australian population is estimated to have both a mental health condition and a chronic physical health condition. Many comorbidities are preventable.

The development of physical illness comorbidities over time is the rule rather than the exception for people with severe mental illnesses.

Comorbidities are associated with significantly higher rates of premature mortality and much higher costs to individuals, health systems and the economy.

Australian data showed that the most common causes of premature death for people who accessed mental health-related Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Schedule (PBS) treatments are ischaemic heart disease and lung cancer (Roberts, 2019).

Predisposing, precipitating and perpetuating factors

There has been an historical tendency to underestimate and under treat physical health problems for people with serious mental health conditions. The reason for this, which are discussed in detail in this report, are complex but include 'diagnostic overshadowing' where the clinician mis-attributes physical health symptoms to a person's mental illness rather than recognising those symptoms as indicative of a separate physical complaint (Castle et al., 2017). This can lead to reduced or absent diagnosis and treatment of physical illnesses and symptoms.
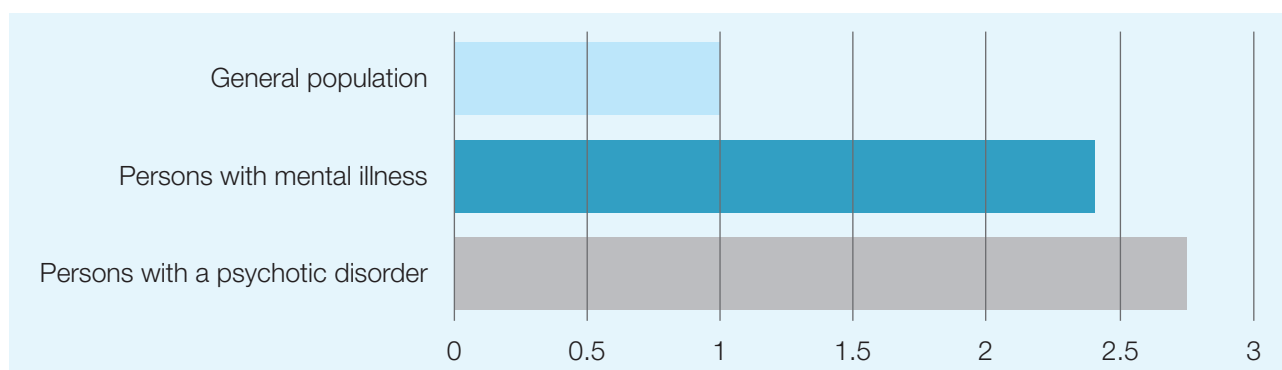
Figure 1. Risk of Premature Death: Ratio of risk

Inserted from "Equally Well The physical health of people living with a mental illness: A narrative literature review" p.6; Figure 2, by R. Roberts, 2019. Retrieved from NSW: https://www.mentalhealthcommission.gov.au/getmedia/49fed7c5-29ea-49f6-927f-3063c81880a9/Literature-review-EquallyWell. Reprinted with permission.

Serious mental illnesses may predispose individuals to risk factors and risk behaviours, which with unmanaged risks from antipsychotic medications can contribute to chronic health conditions including obesity, diabetes, cardiovascular disease and cancers (Castle et al., 2017).

Contributing factors influencing physical health

There are many contributory factors for poor physical health (see Table 1), including some that precede serious mental illnesses (bidirectional risks). For instance, raised rates of metabolic syndrome may precede the introduction of antipsychotics (Castle et al., 2017).

Medication factors

The most important medication issue is antipsychotic choice

Antipsychotics are effective drugs but are associated with the risk of serious adverse effects on physical health. In short-term treatments, the use of these

medications has been associated with weight gain, dyslipidaemias (blood lipid levels that are too high or low, contributory factors for CVD), glucose metabolism dysregulation and with cardiac risks including QTc prolongation and sudden cardiac death. Although antipsychotic medications are associated with physical health risk factors and adverse events, a 20 year follow up study in Finland showed reduced mortality rates in people with schizophrenia treated with antipsychotic medication. The nationwide study found that the cumulative mortality rates were 46.2% for no antipsychotic use, 25.7% for any antipsychotic use, and 15.6% for clozapine use. The authors suggest that improved schizophrenia in those treated with antipsychotics might have positively impacted long term survival. In particular, the significant long term survival of people treated with clozapine is considered to be likely to result from close monitoring in accordance with a protocol for people on clozapine (Taipale et al., 2020).

Obesity and metabolic syndrome

The commonest remediable problems are obesity and the metabolic syndrome. Obesity is a significant modifiable risk factor for many chronic diseases,

Mental illness factors	Disorganisation of actions
	Inappropriate affect
	Executive functioning
	Verbal fluency
	Motor speed or working memory
	Panic and social anxiety
	Apathy, withdrawal, lack of motivation
	Depression leading to carbohydrate craving and weight gain
Antipsychotic medication	Obesity
	Diabetes
	Cardiovascular Disease
Metabolic Syndrome	Raised cholesterol and triglycerides
	Raised blood pressure
	Raised blood glucose
	Obesity
Lifestyle factors	Less likelihood of taking regular exercise
	Low fruit and vegetable intake
	High rates of smoking, alcohol and drug use
	Poor dental health
Socioeconomic factors	Restricted financial resources
	Restricted social networks and little peer or family support
Health system factors	Stigma and discrimination
	Services are reactive and fragmented
	Cost barriers

Table 1. Risk factors contributing to poor physical health

including cardiovascular disease (CVD), type 2 diabetes, hypertension, hypercholesterolaemia, certain types of cancer, osteoarthritis, gallbladder disease and mental health problems (World Health Organization, 2000). The traditional CVD risk factors of smoking, hypertension and hypercholesterolaemia have been the main focus of prevention and treatment programs for several decades, with only limited attention given to obesity (Bennett & Magnus, 1994). Recent guidelines show increasing recognition that *global* risk — integrating a person's individual risk factors with age, sex and any vascular disease already present — is central to risk factor assessment and management (Lalor, 2012).

In recent years, a clustering of risk factors (hyperglycaemia, hypertension, hypertriglyceridaemia, low levels of high-density lipoprotein [HDL] cholesterol, and overweight/obesity) identified as "metabolic syndrome" (MetS) has gained widespread recognition (Alberti & Zimmet, 1998; Grundy et al., 2002). MetS is strongly associated with an increased risk of type 2 diabetes and CVD (Galassi, 2006; Janus et al., 2007). Metformin and newer agents, though not covered by PBS, offer options for prevention and treatment (Appendix B: Volume 2; p.8).

Diabetes

Unchecked Metabolic Syndrome progresses to diabetes. In a recent British study (Lister et al., 2021), people with severe mental illness were more likely to have diabetes if they were taking atypical antipsychotics, were living in areas of social deprivation, or were of Asian or black ethnicity. A substantial minority developed diabetes prior to severe mental illness. Compared with people with diabetes alone, people with both severe mental illness and diabetes received more frequent physical checks, maintained tighter glycaemic and blood pressure control, and had fewer recorded physical comorbidities and elective admissions, on average. However, they had more emergency admissions and a significantly higher risk of all-cause mortality than people with diabetes but no severe mental illness.

These paradoxical results may be explained by other findings. For example, people with severe mental illness and diabetes were more likely to live in socially deprived areas, which is associated with reduced frequency of health checks, poorer health outcomes and higher mortality risk. In interviews, participants frequently described prioritising their mental illness over their diabetes (e.g. tolerating antipsychotic side effects, despite awareness of harmful impacts on diabetes control) and feeling overwhelmed by competing treatment demands from multiple morbidities (Lister et al., 2021). Both service

users and practitioners acknowledged misattributing physical symptoms to poor mental health ('diagnostic overshadowing').

Health system factors

Health service systems are fragmented and complex to negotiate and can include financial barriers for some. Health services are largely reactive, providing care to people seeking health care. As such, health services are not purposefully designed to offer the best care for people with serious mental illness. For this group in the population, there are lower rates of screening for cardiovascular risk factors such as blood pressure and cholesterol, and lower rates of participation in national screening programs like mammography. There are lower rates of prescribed cardiovascular drugs especially lipid lowering and antihypertensive agents, and rates of surgical interventions, radio- and chemotherapy are lower and outcomes poorer. Dental health is poor (de Oliveira et al., 2010).

People with serious mental illness can carry several risk factors including raised blood pressure, cholesterol, glucose, weight and tobacco consumption. The role of general practice is to identify and manage these risk factors through a comprehensive suite of system components and improvements tailored to the particular and intense nature of the health risks among this population group. Much of this practice already exists but is not proactive or systematic for people with serious mental illness. Community pharmacies also commonly support the provision of diabetes and cardiovascular disease screening.

Contributing factors: from the consumer and carer perspective

I feel I have had to choose between improving my physical health over my mental health, an impossible choice. Not really a choice at all.

The Consumer and Carer group described the major issues that influence the physical health of people living with serious mental illnesses as:

- Discrimination and stigma – the diagnosis of mental illness means that physical health is not as important, physical health issues are often disregarded as a symptom of mental illness
- Narrow focus on mental illness and not on whole-of-person health; reliance on medication as the principal or sole form of treatment and support with mental illness

- Choice and control regarding health care is not respected. Informed consent is often compromised or disregarded in focus on urgent treatment

- Lack of respect for individual concern about and experience with medication impacts on weight and physical health. Options of alternative treatments are not common or usual

- Financial barriers prevent consumer access to GP care and to private health care and prevent access to physical health supports such as gym membership or fresh food and good nutrition

- Lack of care and services integration including:

  - lack of follow-up post-acute care

  - lack of coordination between acute care and primary health care

  - unrealistic expectations that people with serious mental illness will cope with multiple medical and associated appointments and manage their daily life needs

  - lack of mental health services concern about diet and physical activity health needs for individuals

  - lack of recognition of critical needs for support, particularly navigation and peer worker support, to engage with physical health care, social support services, education and employment

  - a chasm between healthcare and available support through the National Disability Insurance Scheme (NDIS)

Contributing factors: from clinical system level perspectives

Stigma and discrimination is alive and well; navigation can be overwhelming – where do you go and how do you get there; there is a lack of accountability and coordination – a confusion of care – with little or no visibility of what is provided, how it is provided and what the outcomes are for the individual.

At the primary care level, contributing factors influencing the poorer physical health of people with serious mental health conditions include:

- Poor and inequitable physical health outcomes in patients with serious mental illness can be attributed to the fragmented care experienced by patients where responsibility for physical health needs falls into cracks between specialist mental health teams and general practice

- Physical health needs should be addressed within a coordinated, proactive and planned system of care

- Physical health impacts of psychiatric medication should inform the choice, dose and duration of medication

- Additional support is needed for some patients and their carers to navigate the health system and to benefit from community and peer groups

- Maldistribution of psychiatrists especially in rural and remote Australia

At the secondary level of care, across specialist and community mental health services together with primary care, contributing factors include:

- Lack of information sharing between health services and health professionals to enable integration of information and care

- Lack of aggregating structures at the meso system level. District or local area mental health services often don't collaborate with each other, and there is fragmentation of care that arises from funding as well as the fragmented and small-scale nature of services

- Lack of access to complementary allied health services that would support interventions to reduce risk factors and improve physical health for people with complex physical and mental health conditions – access is inhibited by low funding of these services with community and specialist mental health services and by financial barriers preventing individual access to private services

- Low rates of screening for cardiovascular risk factors in people with a mental illness are partly due to barriers to help seeking, partly to diagnostic overshadowing, and partly to lack of systematised coherent approaches that emphasise that it is 'everyone's business' and that everyone (individual consumer, family, clinicians, non-clinical support staff) has an important role to play

- There are major gaps in translation of findings from screening to actual intervention

At the macro level of health system operation and management, factors contributing to the poor physical health care for people with serious mental health conditions include:

- Little or no purposeful service integration arrangements for this high-risk population that needs to access multiple services and clinicians over time

- Little or no data collection in both public and private mental health services to inform health service provision, resourcing and to measure and evaluate health care and health care outcomes for this high-risk population

- Lack of appropriate and integrated services is a major factor. Long inpatient stays can arise because of lack of step-down care options; and frequent readmissions occur because of lack of community support options
- Specialisation of inpatient psychiatric services excludes a focus on physical health conditions and illness
- Lack of comprehensive funding for known and predictable care needs for this high-risk population is a major barrier; individuals have to navigate multiple clinical services regardless of their health and capacity
- Complete lack of continuous case management and care support service provision for individuals who have to navigate, or not, multiple clinical services regardless of their health and capacity and in the face of an ongoing health condition with predictable risk factors for poor physical health and elevated risk of premature mortality arising from poor physical health

The issues of stigma and discrimination; navigation of multiple providers by individuals; inadequate models of care with lack of accountability, coordination and a lack of community-based care and support systems and adequate research and evaluation into care and care outcomes were identified as system-wide factors.

Contributing factors relevant to the quality of care include:

- Lack of a structured approach to reducing the time to bridge the gap between evidence and practice
- Lack of practical and easy to use clinician measures, patient reported measures, process and access measures and indicators of social determinants to identify what matters to consumers with measures that are reportable
- Good work has been done but not then implemented systematically
- Lack of an adequate, additional specialised workforce, such as mental health nurses to support patients through their engagement with health services and increase participation

Health care funding

Health expenditure overall is increasing in Australia and internationally. The main determinants of increasing costs are related to population ageing, costs of technology and the burden of disease due to chronic physical and mental health conditions (World Health Organization, 2013). These determinants are expected to persist and maintain the upward trend in expenditure over coming decades.

Healthcare funding reinforces current health care structures and practices. Medicare, for example, was designed as a public insurance mechanism to manage one-off or episodic illnesses, based on a fee for service for each consultation. Fee for service and activity-based funding does not incentivise the coordination and monitoring of long-term care for comorbid mental and physical health conditions.

These funding arrangements are no longer fit for purpose; they have not been changed to account for changing patterns of health and disease in the population, the concurrent rise in costs and the increasing challenges of provision of quality care with rising complexity.

In Australia, mental health costs account for 6.5% of all health care costs. The AIHW estimates that around $8.5 billion per annum is spent on mental health-related services in Australia (Australian Institute of Health Welfare, 2021). Services include residential and community services, hospital-based services (both inpatient and outpatient), and consultation with specialists and general practitioners. There are significant deficits in mental health funding across the board. In 2014-15, mental health received around 5.25% of the overall health budget despite representing 12% of the total burden of disease (Rosenberg, 2017). There is significant underfunding across many mental health services, in particular, community mental health services, services for Aboriginal and Torres Strait Islander people and services in regional and remote areas (O'Kane & Tsey, 2004).

Many health services also struggle with access and capacity issues. For example, there are fewer GPs and medical specialists and almost no psychiatrists in less advantaged parts of the country, including outer suburbs, rural and remote areas. Outcomes in chronic diseases are poorer in rural and remote Australia (Tideman et al., 2013). There are few GPs in many parts of regional Australia. Major hospitals are in central locations (or at least locations that were central when they were established). For fixed funding programs, these factors are often magnified.

PROJECT METHOD

Project definitions and scope

This project used the terms serious mental illness and serious mental health conditions. The project working definition of serious mental illness has included conditions requiring antipsychotic therapy, those requiring shared care provided between psychiatrists and GPs and thought disorder conditions rather than neuroses.

The Australian Government recognises that managing the risk factors for the conditions that lead to disproportionate levels of morbidity and premature mortality in people with serious mental illness requires a high-risk approach to prevention which is the work of general practice. This work is accepted by general practice and funded through Medicare.

The high-risk approach to risk factor reduction has the strongest evidence based on systematic reviews of randomized controlled trials. Population-based approaches to risk factor reduction are not initiated or managed at the microsystem level but are recognised as contributing to the combined approach to prevention at national level – outside the scope of this project.

We have used the hierarchy of evidence (Joanna Briggs Institute, 2014) to assess the strongest evidence supporting proposed policy and practice actions developed by working groups. This includes evidence supporting implementation approaches.

The project aim: implementable health policy

The aim of this project was to develop proposals for change that are practical, feasible within current health service system infrastructure and designed on the basis of high-quality evidence to reduce the risk of premature mortality and deliver better physical health care and outcomes for people living with serious mental illness. The recommended initiatives are designed to be readily understood, supported and capable of implementation by front line staff.

Health policy is the means to health system improvement. Health policy is defined by the World Health Organization as decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society and, "clarifies the values on which a policy is based; it defines a vision for the future; which in turn helps to establish objectives and the priorities among them; and it facilitates setting targets and milestones for the short and medium term" (World Health Organization - Europe, 2021).

However, the successful implementation of policy initiatives are influenced by their context (Furst et al., 2019; Hudson et al., 2019) and particularly by contexts that are geographically, socioeconomically or culturally distinct from those of the majority of the population, notably rural environments (Perkins et al., 2019). This can and often does mean that, when government enacts new policy to achieve policy aims, and even when legislation shifts vital underpinning systems such as financing, it does not automatically follow that the policy will be implemented exactly as the government intends. Those working at the front lines are ultimately the determining element in the translation of the policy intention into changed practice and who, by their advocacy for the change, can most influence the opinions, experiences and outcomes of patients and communities (Gilson, 2016). This is the premise of the 'bottom-up' school of thought on policy implementation. Engagement of the 'street level bureaucrat' is vital in implementing public policy (Hudson 1993 cited in Hudson et al., 2019). This front line actor has ''discretionary power (that) can prove instrumental in determining the success or failure of a policy" (Lipsky, 2010).

These ideas have shaped the method chosen to develop the *Being Equally Well Roadmap* proposals. This has involved the recognition that policy makers and managers operating at a remove from the point of healthcare delivery cannot succeed without having some grasp of what happens on, or close to, the front line. It is increasingly recognised that "the micro practices of power exercised by front line providers influence the experience and consequences of policy implementation, helping to explain the policy implementation gap, and represent a core element of health system complexity" (Gilson et al., 2014).

What makes Being Equally Well different?

The overall question posed by the project was:

What needs to change at the front lines of clinical care and how can the changes be supported?

The principles of evidence-based medicine used throughout the project included the recognition of different and equivalent kinds of knowledge (Scottish Intercollegiate Guidelines Network (SIGN), 2019):

- Knowledge derived from research, sometimes called evidence
- Knowledge derived from audit and routinely collected data, sometimes called statistics
- Knowledge derived from the experience of patients, service users and professionals

There are two central aspects to the challenge of better physical health care and longer lives for individuals. These are the relationships between consumers and their health care providers; and the roles of those health professionals involved in the physical and mental health care of people with serious mental illness.

This project brings together the knowledge of consumers and carers with the knowledge of mental health and primary care professionals to strengthen prevention, treatment, care and support. The project set out to ensure that the relationship between consumers and their health professionals was at the centre of this project; alongside and clarifying the professional roles and relationships of the medical and other health professionals that are central to the physical health care of people with serious mental illness.

To enable these communities of knowledge to develop and to inform each other through the project, its design took an original three-angled approach to determining feasible, system-wide improvements. This comprised:

- The Clinical Microsystem Approach;
- Consumer and Carer iterative review of current and optimal health care; and
- Thematic Analysis.

Project organisation

The Clinical Microsystems Approach

The Clinical Microsystem Approach was developed by the Institute for Healthcare Improvement in Boston, led by Donald Berwick and Paul Batalden (Institute for Healthcare Improvement, 2021). Their quality improvement in healthcare movement has its origins in the work of W. Edwards Deming, the statistician involved in statistical process control during the Second World War and leader of quality improvement adopted by Japanese manufacturing in the post-war period. Batalden asked Deming whether his work on quality improvement could be applied to healthcare. Based on his wife's experience of illness over a year, Deming said that healthcare had a lot to learn from quality improvement in industry (Paul Batalden, 2008).

If we improve Microsystems, we improve everything.

Don Berwick MD, President Emeritus,
Institute for Healthcare Improvement
(Nelson et al., 2007).

Clinical Microsystems are the small, functional front line units that provide most healthcare to most people. They are the essential building blocks of larger organisations and of the health system - the place where patients, families and care teams meet. The quality, safety and value of care produced by a large healthcare system can be no better than the services generated by the small systems of which it is composed. The efficacy and quality outcomes of larger organisations are dependent on the capability of the Clinical Microsystems within them. Effective and sustained improvement to the macrosystem requires transformation throughout its contributing components using a system-based approach. Although change is required at all levels of the system, the Microsystem concept offers an opportunity to transform healthcare at the front lines of service delivery (Nelson et al., 2007).

This system perspective also recognises that better health care for individuals is dependent on what leaders at all levels of the health system need to know and do to create the conditions of excellence in the front lines of health care. Each patient's care is only as good as the care that is actually delivered by the front line staff. This is the place where clinical policies such as register and recall, guidelines and protocols are actuated. It is here and only here that safety, quality and value are built - by people at the sharp end. It is where patient satisfaction is generated. Background on the Clinical Microsystem is at Appendix C (Volume 2; p.21) (Nelson et al., 2007).

The project brought people from the front lines of health care provision into three working groups representing each level of the health care system:

- **Macrosystem:** federal, state and territory governments; NMHC, AHMAC, private health insurance
- **Mesosystem:** Primary Health Networks (PHNs), Local Health Networks/Districts (LHN/Ds), professional and industrial bodies
- **Microsystem:** the teams at the front lines of care where patients and their families meet the health system. These teams include General Practice, acute and community mental health services

The role of the macrosystem and mesosystem working groups was to determine how to support the microsystems to do better work improving the physical health of people with serious mental illness.

A fourth group worked on quality improvement to identify methods and measures to systematically improve the provision of healthcare. To improve health care requires a systematic approach, and designing, testing and implementing changes using real-time measurement for improvement (Fitzpatrick, 2021) (Appendix D: Volume 2; p.23). The Quality Improvement group looked at how recommendations at the macro-, meso- and micro- levels could be implemented using current knowledge of quality improvement.

There are now three decades of experience in implementation of quality improvement in healthcare which is widespread throughout comparable health systems. New South Wales Health, Queensland Health and SA Health have clinical excellence centres. Safer Care Victoria has established a Victorian clinical governance framework to ensure individual and collective accountability for high quality and safe care. From 2004-2014, one third of primary care practices across Australia participated in Australian Primary Care Collaboratives that were supported by the Improvement Foundation Australia (Appendix D: Volume 2; p.23).

All working groups were asked to also address issues specific to rural communities and individuals and communities that are socioeconomically disadvantaged.

A consultation group of Consumers and Carers worked iteratively with these groups, providing the lived experience, knowledge and perspective of health care, of access to healthcare, and of the outcomes of health care for individuals. The group developed the measures of what success would look like for this project which were used by the clinical systems level groups through their discussions. A joint meeting was held between the Consumer and Carer group and the chairpersons of the clinical systems level working groups and the Quality Improvement group which reviewed the barriers and disablers identified by working groups and discussed how to address the measures of success developed and agreed by the Consumer and Carer group. A final meeting of all available participants discussed the outcomes of the thematic analysis and the recommendations of the working groups.
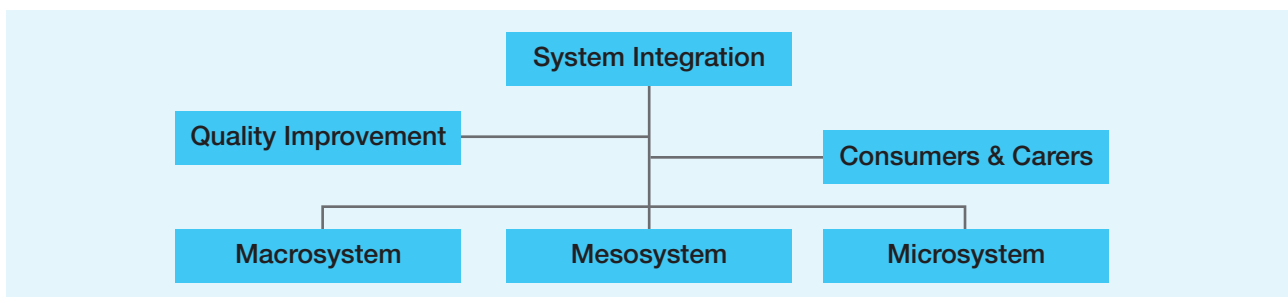
Figure 2. Organisation Chart of the project expert working groups

To ensure cohesive and coherent outputs and project outcomes, the chairpersons of all groups and the project leaders worked as a **System Integration group** to support the work of each group in relation to the others in an iterative process throughout the project. The group then worked to consider the combined outcomes and proposals of the project. Working groups members are listed on the final page of this report (p82).

Thematic analysis was incorporated to capture systematically the detail of discussions in each meeting and, as the project progressed, to share these details with the working groups to enable them to acquire a 'helicopter' perspective of the key issues, themes and priorities. Thematic analysis is a method applied to qualitative data, usually a set of texts such as interview transcripts (Clarke & Braun, 2014). The researcher closely examines the data to identify common topics, ideas and patterns of meaning that come up repeatedly.

There are various approaches to conducting thematic analysis, but the most common form follows a six-step process:

- Familiarisation
- Coding
- Generating themes
- Reviewing themes
- Defining and naming themes
- Writing up

During the development of the *Roadmap*, discussion in the expert groups was free-flowing. Information of this kind is usually captured in the minutes of discussions. However, these inevitably condense the discussion in ways that may obscure or distort the importance of the issues which are raised. The transfer of information between expert groups proved challenging for this complex project; hence the importance of establishing a transparent and accountable process to identify the themes and their relative importance. The analysis was undertaken with the support of mixed methods research software called Dedoose.

1. Each group met online using Zoom, as the project involved participants in a number of states and territories. The audio and video recordings from Zoom were uploaded to Dedoose. The researchers watched each meeting and extracted numerous 'key statements' from each. This process is known as 'excerpting'. It is an intensive and time-consuming process.

2. The excerpts were then coded to identify major and subsidiary themes. The initial coding list, identified by the researchers was refined in discussion with a number of participants in the process. Initial plans to weight some statements/themes were changed as it was felt that weighting was vulnerable to bias. The themes identified and illustrated in the word clouds and charts provided in the Findings and Results discussion later in this report reflect the frequency with which they were mentioned by participants in the *Roadmap* development process and therefore their importance to participants.

The findings of the thematic analysis are discussed in detail in the Findings and Results discussion in this report.

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EXPERT WORKING GROUP REPORTS

The Lived Experience: Consumer and Carer consultation group

Dave Peters (Chair), Lee Cobb (Rapporteur), Tim Heffernan, Assoc Prof Michelle Banfield, Judy Bentley, Fay Jackson, Michael Burge AM, Lyn English AM, Debbie Childs, Anita Cowlishaw

Purpose

The Consumer and Carer consultation group objective was to work in collaboration with the clinical microsystems working groups to ensure a lived experience voice and perspective was central to all aspects of the project and to contribute to the change sought by consumers and carers.

Measures of success

The agreed measures of success in achieving improved physical health and reducing the life span gap for people living with serious mental illness are:

- To have good quality of life
- Keeping on top of chronic health issues
- Having prompt and safe treatment of acute health issues
- Being practically, psychologically and emotionally supported to engage in proactive health screening
- Being "mindful and conscious of the informed risks that I take (such as harmful behaviours) with support and information available should I want to work on any of these areas"
- With a "good, trusting relationship with doctors, especially GPs, who see beyond my mental health diagnosis without a cognitive bias or diagnostic overshadowing, seeing the whole of me and inherently invested in my health"

Recommendations

- Provide people with serious mental illness with affordable access to general practitioners, other primary health care and peer workers.
- Provide incentive support for general practice to engage in comprehensive mental and physical health care including:
  - shared care with treating psychiatrists and/or specialist general physicians
  - independent access to non-treating psychiatrists and/or specialist general physicians for treatment review and advice.
- Ensure informed consent is integral to ongoing medication management of serious mental illness.
- Peer worker integration in primary health care with MBS funding.
- Consumer-informed engagement and support initiatives to reach out to people with SMI who do not engage with primary health care.
- Establish independent consumer and carer co-designed and centred national service audit scheme.
- Provide people with serious mental illness with access to peer and professional support to navigate health and social services, education and employment.

Problems

- **Discrimination and stigma** – the diagnosis of mental illness means that physical health is not as important, physical health issues are often disregarded as a symptom of mental illness, and disclosing mental illness has resulted in reduced or withdrawn attention to physical health conditions and issues.

Better health care for individuals is significantly dependent on what leaders at all levels of the health system need to know and do to create the conditions of excellence in the front lines of health care. Each individual's care is only as good as the care that is actually delivered by the front line staff.

- **Narrow focus on mental illness and not on whole-of-person health** – reliance on medication as the principal or sole form of treatment and support with mental illness, and lack of respect for individual concern about and experience with medication impacts on weight and physical health. Choice between physical health and mental health should not have to be a choice. Physical health should be, but isn't, recognised as not merely part of mental health treatment but as a central part of the individual consumer's life.

- **Choice and control regarding health care isn't respected** – informed consent is often compromised or disregarded with focus on urgent treatment. The individual experience of and concerns about side effects of medications are not respected. Options of alternative treatments are not common or usual.

- **Economic barriers** prevent consumer purchases of private healthcare and particularly access to a GP where bulk billing isn't available, and prevent access to physical health supports such as gym membership or fresh food and good nutrition.

- **Lack of services integration** including:
  - lack of follow-up post-acute care
  - lack of coordination between acute care and primary health care
  - unrealistic expectations that people with serious mental illness will cope with multiple medical and associated appointments and manage their daily life needs
  - lack of mental health services concern about diet and physical activity health needs for individuals
  - lack of recognition of critical needs for support to engage with physical healthcare and social support services, such as system-navigation support and peer worker services and support
  - a chasm between healthcare and support through the National Disability Insurance Scheme (NDIS)

- **Lack of recognition of the potential of peer support and peer workforce roles in health care** – whilst there is limited research evidence to date of the benefits from peer support (McKeon et al., 2021; Stubbs et al., 2016), the experience of peer support by consumers and carers and the strong advocacy for this to be incorporated in health care for people with mental illness should not be disregarded.

Evidence of what works to address these problems

Services identified as providing, endeavouring to provide, or having provided respectful, integrated healthcare and/or essential support are:

- Gold Coast and Brisbane North PHNs have established shared care service models that provide exemplars (Brisbane North PHN, 2019; Gold Coast Primary Health Network, 2020).

- Regional plan for mental health and suicide prevention in South Eastern NSW was developed with leadership by people with lived experience (Coordinare – South Eastern NSW PHN, 2020). It recognises the peer workforce as a critical workforce needed to promote mental health and wellbeing.

- The Planetree model of accreditation/certification (established in the USA 40 years ago to promote patient-centred care) provides health service resources with which to implement person-centred care systematically and sustainably. It requires a comprehensive, formalised approach to engaging individuals and their families in all aspects of care. The Planetree accreditation framework has been implemented in a diverse range of facilities in the USA and internationally and has had some take-up in Australia (Children's Health Queensland, 2021; Metro South Health, 2019).

- The Primary Care Psychiatric Liaison Service (PC-PLS) model is an initiative by Western Sydney Primary Health Network (WSPHN) and Flourish Australia designed to support general practices to provide comprehensive care to people in a primary care setting (Flourish Australia, 2021).

- Active8 is a physical health and wellbeing project that supports people in South Eastern New South Wales with lived experience of mental health issues, as well as physical health issues (Mental Health Commission of NSW, 2021).

- Integrated Chronic Care service model in Melbourne provides nurse support (navigation support) for people experiencing severe and persistent mental illness and chronic physical health conditions (Neami National, 2021).

- Flourish Australia has a well-established tool to aid communication by people with mental illness with their health professionals and others (Flourish Australia, 2019).

- Partners in Recovery program (CW program, decommissioned 2019) (MHCC, 2019) was targeted at better coordination between services such as medical care, housing, income support, employment, education and rehabilitation services that support people with mental illness and complex needs and was effective in helping people gain motivation and engage in physical health and participate in education, employment and community. Current programs (psychosocial measures) are funded through 31 PHNs. An evaluation has been commissioned (Department of Health, 2021).

Proposed policy and practice improvements

The group agreed that the policy, service models and practices essential to achieving improved physical health and reducing the life span gap for people living with serious mental illness are:

- Affordable access to general practitioners, other primary health care and peer workers
- Incentive support for general practice to engage in comprehensive mental and physical health care including:

  - shared care with treating psychiatrists and/or specialist general physicians
  - independent access to non-treating psychiatrists and/or specialist general physicians for treatment review and advice
  - peer worker integration in primary health care with MBS funding
  - navigation support for health and other support services for all including community based recovery model of support and service provision (e.g. Partners in Recovery program, decommissioned in 2019)
  - consumer-informed engagement and support initiatives to reach out to people with SMI who do not engage with primary health care
  - models for national PHN implementation that are considered to be best practice (e.g. Gold Coast and Brisbane North PHNs) including guidelines, performance standards and public reporting measures
  - consumer and carer co-designed and centred independent national service audit scheme

Discussion

The group agreed that the measures of success in achieving improved physical health and reducing the life span gap for people living with serious mental illness comprise:

Physical health outcomes

- Good quality of life, able to keep on top of SMI, living long healthy lives
- Can have physical health checks and treatment swiftly, effectively and economically
- Long term success would be reducing the life expectancy gap between people with SMI and the rest of the population to zero

Medication impact

- Recognition of harmful impact of medications with other options prioritised
- Clinicians understand the person first, not the diagnosis – resisting medications as a first option, listening and acting on what the persons says. Person's agency or motivation comes when person's focus is addressed
- When medications are necessary health professionals and services recognise the effects of the medication
- Recognition that the medication, not necessarily the illness, makes people susceptible to unhealthy lifestyles

Relationship with health professionals

- Have good, trusting relationships with treating practitioners, particularly their GP
- A relational recovery approach as well to address impacts of trauma
- Clinicians understand the person first, not the diagnosis – resisting medications as a first option, listening and acting on what the persons says. Person's agency or motivation comes when person's focus is addressed
- Clinicians listen and believe individuals when they express concern about their physical health and act on it

Navigation support

- Can have physical health checks and treatment swiftly and effectively and economically
- Have support to navigate the system for both mental and physical health
- Peer support and integration of lived experience

- Investment in peer support services and offering them as a first option
- People with lived experience are involved in quality control of services and in supervision for health professionals
- Consumer and carer driven national audit team reviewing service providers who genuinely demonstrate they are fulfilling the guidelines

Equity of access and quality of care

- Can have physical health checks and treatment swiftly and effectively
- Have access to what they need: accessibility, availability and affordability are key for both carers and consumers
- Tailored motivational strategies for people with SMI to be physically healthy

Integrating perspectives – consumers and clinicians

In a joint meeting with chairpersons of the clinical systems expert working groups, the group emphasised that their lived experience included:

- Lack of or no communication between general practitioner and psychiatrist about physical health care and risks, including evident and substantial weight gain.
- Lack of focus on an individual's physical health by the health professionals means that the individual either lacks awareness themselves, lacks confidence or lacks motivation.
- An added and greater barrier can be the lack of knowledge for the individual about how to start, what to change, where to seek specialist or generalist assistance. Often once the issue has presented in an individual, it is extremely difficult to get started as it seems like it's too late to change anything.
- Consumer confidence to raise issues of physical health with doctors is most often reliant on a result of peer support, navigational support or a carer/support person.
- Medication dominates interactions with health professionals, with too little attention to alternatives, to consumer choice and control, to informed consent, to the consumer's concerns regarding adverse side effects or their overall health and wellbeing.

- If suicidality is considered a risk, informed consent may need to be deferred but should not be set aside. It follows that once suicidality is no longer a risk, treating health professionals must seek informed consent to treatment.
- At a time of acute mental illness, the individual may be unable to make an informed decision. Later on it would be really good to discuss what the medication regime entails. For very unwell people, carers should be able to be part of a shared care plan.
- For continuity of care, affordability is crucial. Lack of capacity to pay can, and often does, mean that an individual with serious mental illness will not have a regular GP and will attend bulk-billing clinics if necessary.
- Pharmacists who engage with the individual can contribute significantly to the individual's knowledge and understanding of medications, side effects and physical health risks and management.
- Peer worker support is important to consumers. The NGO sector can play a pivotal role in addressing the shortfalls of the primary and tertiary health systems. Peer workers based in independent NGOs could play a major role – such as the Integrated Chronic Care program in Melbourne.
- The choice between physical health and mental health should not be a choice.

"Dealing with people in a state of crisis, in mental distress and emotional distress, it feels like, to those of us who have lived through that, we are constantly surviving between crises. And it is difficult to ever address the underlining issues that seem like a lower priority until a shock to the system comes along and suddenly you are at immensely high-risk of developing a deadly disease. There is reluctance to talk about the risk factors and side effects of treatments in case the person declines that treatment. The impetus should be shared responsibility, and informed consent is vital."

"We need doctors to be doctors, whether they are your psychiatrist or GP. If a medication is prescribed for you that should be discussed including concerns, risks and potential benefits and at least initial monitoring. And the psychiatrist and referring GP need to be in contact and keep each other up to date."

The joint meeting agreed there are two major challenges:

- What to do at the point of crisis when medication may be introduced without informed consent and with long term predictable impacts.

- In the longer term, dealing appropriately and effectively with those impacts and the consequences of them.

What needs to be built to support people and to build the relationships that will make a difference to health outcomes?

Consumers and carers refer to "my pharmacists, my GP, my psychologists." The "my" really makes a difference. The challenge for clinical systems groups is how do we take the clear messages about what it looks like from the consumer and carer perspective into this work about what can be done by funders, practitioners, service providers and how to drive the changes that are needed by perhaps introducing measures of accountability, measures of performance and measures of quality?

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The Clinical Microsystem: the role of general practice and primary health care

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Purpose

Clinical microsystems are the coal-face groups of clinicians that provide direct patient care. They include GP clinics, private and public psychiatric services and community mental health services. The Clinical Microsystem working group brought together experts from these settings, informed by community and lived experience expertise to re-imagine better care delivery to address the physical health of people with serious mental illness living in Australia.

The priority recommendations of the Clinical Microsystem working group will be enabled by implementation of the recommendations from across the Being Equally Well project expert groups.

Recommendations

- Use existing clinical guidelines to develop protocols for managing physical health of people with serious mental illness within formal Shared Care Arrangements using living registers in each clinical setting to keep track of patient-care processes.

- Invest in a community mental health nurse workforce embedded in GP clinics to support clinical care navigation and case management. Lifestyle coaching and engagement with carer, community and peer supports is also required.

- Implement existing medication-choice guidelines and frequent, planned reviews to minimise the physical harms associated with psychiatric medications engaging the patient's mental health clinicians, GP and pharmacist.

- Optimise the use of routinely collected clinical information and computer decision support within general practice to achieve quality improvement towards equitable physical health for patients with serious mental illness.

Problems

- Poor and inequitable physical health outcomes in patients with serious mental illness can be attributed to the fragmented care experienced by patients where responsibility for physical health needs falls into cracks between specialist mental health teams and general practice.

- Physical health needs should be addressed within a coordinated, proactive and planned system of care.

- Physical health impacts of psychiatric medication should inform the choice, dose and duration of medication.

- Additional support is needed for some patients and their carers to navigate the health system and to benefit from community and peer groups.

Evidence of what works to address these problems

The Microsystem working group developed recommendations based on an extensive and diverse range of expertise and experiences as clinicians, policymakers, advocates and researchers. There was significant discussion about the problems faced by people with SMI in managing physical illness, and the most appropriate approach to care in an Australian context. Acknowledgment was made of the ongoing significant challenges for people with SMI regarding stigma, continuity of care, failure to manage their physical care needs, persistently high smoking rates, and the additional impact of antipsychotic medications on cardiometabolic risk (in particular weight gain).

Extensive observations were made relating to the current workforce context and its influence on quality of care and outcomes, including:

- Access to care is challenging, and there is also fragmentation of care. GPs are sometimes the only avenue for management of SMIs and co-morbidities in rural areas where mental health services are hard to access. Conversely, some people with SMIs do not have any relationship with general practice – this can stem from a reluctance among GPs to take on patients with SMI adversely affecting access to primary care (partly out of a stigma among health professionals, but also concerns about workload and inadequate specialist support/timely referral access). Equally, some patients may change location frequently, or might avoid general practice owing to previous negative experiences of healthcare in that setting.

- There is an unclear delineation of roles and responsibilities between general practice and mental health/psychiatric services, often leading to patients slipping between the cracks. Likewise the roles and responsibilities of pharmacists around medication use are not well defined from a multidisciplinary context.

- There is inadequate capacity in the mental health workforce generally to support management of physical health – both in terms of capacity and the skills base.

- Current efforts at addressing some of the above challenges that were perceived to have some success have included: employment of GPs within psychiatric services, implementation of lived experience support programs, and embedding public mental health workers within general practice.

- The skills base for cardiometabolic screening lies in general practice and is not particularly prevalent within psychiatric services.

- Diagnostic overshadowing was considered quite prevalent, whereby clinical signs and symptoms are attributed to mental health issues and consequently physical conditions are underdiagnosed and undertreated.

- Consideration of such contextual healthcare delivery and patient factors were instrumental to subsequently achieving consensus around priority recommendations, in conjunction with a consideration of the research evidence base. Taken together, the recommendations were considered the most important steps at a microsystem level to improve management of physical health issues. It was considered that this outcome would be achieved by ensuring that all relevant patients could be systematically identified and supported in a timely manner, that the necessary expertise to provide appropriate care would be accessible, and that care would be coordinated so that patients do not fall through the cracks of a fragmented system.

Proposed policy and practice improvements

Our proposed model integrates a combination of collaborative care within general practice, shared care between treating health professionals and teams, and use of care coordinators. The individual recommendations that would support this model are as follows, and are described in more detail in the accompanying proposal:

1. Build a 'living register' in general practices of patients living with SMI

Practice incentive payments were considered a potential vehicle for incentivising general practice development of registers. A register would support identification of relevant individuals and promotion of care for physical health issues. Recognising that the register should be simple to construct, it was decided that the most appropriate course of action was to base the register primarily on use of easily identifiable key medications and conditions, with the capacity to manually add other relevant individuals as described in the proposal. The idea of focusing on patients discharged following an acute event was mentioned, but this was treated with caution - many with enduring mental health issues who would potentially benefit have not had an admission for years.

2. Develop protocols for management of physical risk factors in patients with SMI

Multifaceted lifestyle interventions delivered by qualified health professionals can have a meaningful impact on prevention of CVD, diabetes and other chronic disease risk factors among individuals with severe mental illness (Baxter et al., 2016; Deenik et al., 2020; Fernández-San-Martín et al., 2014; Vancampfort et al., 2019; Ward et al., 2015). There is increasing recognition of the need to focus on how to implement these interventions effectively for patients with SMI (Deenik et al., 2020).

The working group considered it essential that care for patients with SMI is holistic, addresses multimorbidity, and engages the individual in shared decision making around physical health. Members felt that there is currently an assumption among healthcare professionals that addressing physical health is not a priority for patients, or that efforts will not work for patients with physical health issues. It was suggested that a paradigm shift is required whereby mental health is managed as a chronic health issue with physical complications. A protocol

was considered effective for shifting expectations of health professionals around clinical management of physical health, and for supporting a routinised approach to addressing physical health needs.

It was also identified that individuals with SMI need to be ready, able and willing to get involved in the management of their physical health – this is not always the case. Many in the target group may avoid routine health checks – some dislike excessive monitoring and report it feels like surveillance. The importance of supporting shared decision-making within these protocols was therefore emphasised as a counterbalance to excessive routinisation of checks, and as a means of focusing on patient priorities.

3. Implement shared care processes described within clinical pathways between psychiatry services (public, hospital and private) and general practice

Shared care is an effective enabler of multidisciplinary collaboration between specialist/ hospital care and primary care clinicians for other clinical areas (Brodribb, 2014). It was highly recommended by the group, and it was deemed very important, to document what professional was responsible for individual tasks. Drug and Alcohol and other services may also need to be engaged.

Given the difficulties with logistics, it was suggested that asynchronous and remote options such as telehealth/apps, as well as use of E-health records might be useful for implementing shared care. An overarching concern of any format is that it remains a safe environment for the patient.

4. Establish community mental health nurse workforce embedded in GP practices

There was considerable support for the engagement of dedicated community mental health nurses (CMHNs), employed by state health services to work in general practice. They would provide clinical care navigation and coordination alongside other responsibilities such as social prescribing, case management, care planning, health behaviour coaching, practice support for quality improvement registers (see recommendation 7) and liaison with carers and family. Working alongside practice nurses, they would support shared decision-making around prioritisation of physical health matters, and facilitate family/carer involvement as appropriate.

A key role would be to integrate involvement from acute and community mental health services, primary care and where necessary, National Disability Insurance Scheme providers.

More broadly, this approach is well established as an effective means for supporting patient self-management and care coordination both in primary care and in the tertiary setting – and preventing people from falling between the gaps (McMurray & Cooper, 2017). Individuals with experience of such a model pointed to the benefits of such a nurse in general practice – not only does it promote access to a multidisciplinary primary care team and improved care coordination for patients with SMI, but their employment by a tertiary health service rather than the practice removes potential financial concerns in primary care about funding of the model.

Clinicians from a nursing rather than a psychology or some other background were considered potentially more appropriate for the role, given the needs for generalist knowledge and skills relating to the need for assessment and management of a broad range of physical health needs. It was identified that most CMHNs are now given initial general training before undertaking specialised training in mental health (therefore they will have developed important competencies around physical health). It was felt that considerable effort would be required to develop and train such a dedicated workforce for embedding in primary care. There are currently not enough nurses with adequate mental health training for the role. Effective implementation at a national level would also require development of greater consistency across states and territories in defining the scope of practice for mental health nurses and practice nurses. There was much support for the idea that general practices should be required to commit to implementing supportive organisational measures for the program, and to accepting new patients with SMI who do not have an existing GP, as a trade-off in return for access to this significant new nursing resource.

The view of the group was that it is not the focus of activities or skills among clinicians in psychiatric services to manage physical health in its entirety. Further training in mental health may be required for GPs. The experience of panel members was that at least some GP training programs in Australia require advanced mental health module – but this training was considered somewhat introductory and more about changing attitudes to the provision of care.

Ideally the role of the GP would be supported through a dedicated MBS item number for health checks among patients with mental health conditions. It was very strongly felt that any general practice support in this area needed to be bulk billed/free for the patient.

5. Role for community pharmacy, hospital pharmacists and non-dispensing practice-based pharmacists

Antipsychotic medicines are a key source of cardiometabolic events among people with SMI, and these side effects such as weight gain are a key source of nonadherence. Active review of medication and switching of agents where appropriate can reduce CVD and diabetes risk profiles (Vancampfort et al., 2019). It was identified that there was an overreliance on antipsychotic and other medications for some patients, for example in small rural areas where alternative forms of management are not easily available. Pharmacists are often quite accessible compared with other health services in such communities (Brewster et al., 2020; Zonneveld et al., 2021) and are trusted as experts in medicines management. There is increasing recognition of the potential to expand their role in the prevention and management of chronic diseases (Brewster et al., 2020; Desse et al., 2021; Mc Namara et al., 2019). Specifically there is significant potential value to be derived from comprehensive medication review that assesses medicines use for cardiovascular and diabetes risk, in addition to supporting the appropriate use of antipsychotic medicines. Pharmacists may also be engaged to support improved medicines adherence and cardiometabolic risk monitoring in appropriate circumstances. It was suggested that the RACGP should work together with relevant pharmacy organisations to develop a joint position statement on defining such a role for people with SMI, and how it should be implemented in practice. The MedsChecks, Diabetes MedsChecks and Home Medicine Review programs might facilitate an appropriate source of revenue to pharmacists for such work.

6. Data-driven quality improvement in general practice

Quality Improvement (QI) approaches to CVD risk management, including the use of patient registers, is highly effective at improving management of chronic disease risk in Australian primary care (Knight et al., 2012). By systematising the identification of relevant processes and delivery of key evidence-based interventions, QI was considered a critical element of ensuring a consistent and equitable delivery of the intervention across practice populations. It was felt that the CMHN would be in an ideal position to drive the patient register and QI initiative across the practice, as well as providing training and coaching to staff. This would remove much of the burden on practices and directly employed staff with implementation, as well as supporting generally increased capacity across the practice to support patients with SMI.

Practice incentive payments for QI (PIP QI) was considered a feasible funding basis, albeit imperfect and possibly requiring adaptation, for individual practices to engage in a collaborative program. Eligibility for PIP QI payments requires practices to engage in QI activities, and to collect an eligible PIP dataset of specified quality improvement measures (QIMs) and provide this to the local PHN, whose role in implementation would also need to be negotiated. Overall it was considered valuable to have a mix of intermediate and outcome QIMs to evaluate practice performance, as well as QIMs evaluating patient satisfaction. The current feasibility of monitoring performance was seen to be enhanced if the chosen QIMs align with existing QIMs for the practice generally, hence the final selection is focused heavily on screening/prevention and risk assessment activities. It was acknowledged that some other performance measures might have also been desirable (e.g. around use of opiates or benzodiazepines) but there was concerns around feasibility of data collection. It was considered appropriate to develop the QIMs over time to encompass a more holistic range of QIMs. Given the demographic and risk profile of patients with SMIs, it was considered appropriate to collect cardiovascular and diabetes-related risk factor data for all adults rather than using target group age ranges on absolute risk guidelines for the general population.

It was recognised that practice change would also be supported by macro-level initiatives to raise awareness of clinicians around life expectancy gaps and health professional roles in addressing these gaps. While these recommendations would entail considerable effort and funding, it was considered that there was enormous potential for return on investment if support for patients can be translated into reduced risk of hospitalisation and greater participation in the workforce.

Discussion

The working group determined that there was adequate evidence to support the general model being proposed, although it has yet to be tested as a single, multifaceted intervention. While the evidence in support of comprehensive care and more intensive, multidisciplinary management of patients' physical health was clear, it was noted that there is not extensive literature to guide the implementation of effective solutions for improving the physical health of people with severe mental illnesses. There was tacit support for the principle of a lived experience worker to provide support for these patients, but supporting evidence was considered lacking at this time. Likewise, it was noted that other outcomes and performance indicators might be desirable in general practice (e.g. use of illicit substances), but current practices and software systems do not lend themselves easily to this adaptation. The importance of training, adequate support for practices, and remuneration was also highlighted by this group but considered the remit of the macrosystem working group.

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The Mesosystem: sharing care across acute care, primary care and specialist services

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Purpose

The purpose of the Mesosystem expert working group (EWG) was to develop a framework and model of care for health structures existing at the mesosystem level, to reduce the disparity in physical health outcomes for people with and without serious mental illness observed both in Australia and internationally. This includes appraisal of models that are successful and unsuccessful and recommendations for changes that could be made to aim towards parity.

Recommendations

- A live data sharing platform should be created to improve communication and enhance shared-care arrangements between different components of the mesosystem. PHNs could oversee the coordination, rollout and maintenance of such a platform. A practice-based register of consumers with serious mental illnesses should be established that would enable an automated recall and alert system to try and improve the regular uptake of screening and monitoring investigations and health checks.

- Some process measures are reported to PHNs by practices. These measures should be the basis for quality improvement coordinated by PHNs.

- A new workforce of practice-based 'Nurse Navigators' should be created to assist consumers in navigating a complex and fragmented health system across different levels of healthcare (Freund, 2017). Further roles will include the empowerment and upskilling of consumers and their carers in managing their own health conditions. The Nurse Navigator system already successfully implemented in the Gold Coast Integrated Care Program can serve as a blueprint for wider implementation across the country (McMurray et al., 2018; Spooner et al., 2019).

- PHN performance data should be shared in a transparent manner with all stakeholders in order to improve clinical performance, to quantify the significant variation in performance between PHNs and to enable targeted support and funding to reduce these disparities. This will be a step toward better utilising the currently existing PHN framework to achieve better physical health outcomes for people living with serious mental illness. Transparency of performance metrics can ensure that funding is appropriately utilised and that services commissioned remain cost effective.

Problems

At the mesosystem level, the main problems identified that contribute to the problem are:

- Fragmentation of the healthcare system, leading to poor integration of care between primary, secondary and tertiary services and poor communication between different components of the mesosystem.

- Complexity of the healthcare system, making it user unfriendly and challenging to navigate between different micro- and mesosystem level organisations.

- Unclear delineation of roles and responsibilities of clinicians in screening, assessment, treatment and monitoring of physical health conditions in consumers with serious mental illness.

- Inequitable and inconsistent access to allied health staff for multidisciplinary input into the management of chronic physical illnesses.

Discussion

The Mesosystem EWG metaphorically conceptualised the Australian healthcare system as a forest.

Structures in the mesosystem represented the individual tree trunks, providing a structure and base for the branches and leaves: the microsystem.

Providing nourishment and resources for growth and stability of the tree trunk were the thick roots of the macrosystem.

Three major 'trunks', or components, of the mesosystem were identified and discussed by the EWG: primary health networks (PHNs), public mental health services and non-government organisations (NGOs), while the Nurse Navigator role was conceptualised as the vine that binds the tree trunks together with allied health and peer workers in complementary and strengthening roles.

1. Primary Health Networks

Established in 2015 and replacing Medicare Locals, all PHNs target the same seven priority groups identified by the Australian Government. They were created to support general practices and to meet the unique needs of local Australian communities by tailoring services to meet service gaps in the local population. This latter aim is achieved by PHNs utilising federal funding to commission a wide range of services for local communities based on regional needs.

For the aims of Being Equally Well, PHNs were considered in the mesosystem for their potential to play a role in the coordination of front line health systems and improvement in equitable access to services, both of which were identified as key problems currently facing Australians with serious mental illness. PHNs play a role in supporting general practices with data collection and extraction tools but less than in the days of Divisions or Medicare Locals. PHN support of general practice to establish register and recall systems, and quality improvement across practices, is paramount given that general practitioners play a primary role in the screening, assessment, management and monitoring of a range of physical health issues that contribute to early mortality in those with serious mental illness.

Ideally there would be automated data sharing software accessible by healthcare providers across different components of the mesosystem, including general practice and public mental health services. This would enable seamless, live information sharing and enhance shared-care arrangements between general practitioners and specialists, thereby improving communication and coordination in the healthcare system. PHNs could play a potential role in the establishment and maintenance of such software. Embedded into it could be a register and recall system, whereby a register of all people with serious mental illness residing in the geographical distribution of a particular PHN could be established. This would enable automated recall alerts to appear, which could potentially improve the regular uptake of screening and monitoring investigations and health checks.

At the macrosystem level, state or federal registries for serious mental illness should be established. The data would be different from practice-based registers or their aggregation at PHN level. Registries would record deaths, prevalence of disease and disability, and health service utilisation rates. Registers largely comprise risk factor data for

the events in the registry. Data linkage between the two should be possible.

A number of barriers exist to PHNs reaching their potential to achieve the Being Equally Well aims. There is significant variation in performance between individual PHNs. Furthermore, many front line staff experience a disconnection between PHNs and individual GP practices due to a lack of local presence and limited communication. Additionally, portions of funding received by PHNs are quarantined for specific use, leading to limited leverage for PHNs to provide the unique services required by the local community (Russell & Dawda, 2019). This furthers the divide between PHNs and the local communities and front line general practitioners in the microsystem they exist to support.

After careful consideration of the strengths and limitations of PHNs, the EWG felt that PHNs were not ideal in their current framework or function to address the problems contributing to the mortality gap between Australians with and without serious mental illness. A recently conducted rapid review exploring the impact of commissioning on the quality, cost and outcomes of services demonstrated that there is significant work that remains to be conducted in the areas of policy and governance, patient registration and information systems (Gardner et al., 2016). The PHN system is said by some to still be in its infancy and have scope for greater maturity and development. In the few years that they have been operating, they have developed at an appropriate rate and amassed considerable expertise in commissioning services (UNSW et al., 2018).

Functions undertaken by their predecessors for general practices need to be restored with new funding and changed governance so that the GP users can design the system.

2. Area-based or district Mental Health Services

Area-based or district Mental Health Services (referred to as local mental health services in this report) play a significant role in the screening and assessment of physical illnesses in Australians with serious mental illness. This is particularly the case for cardiometabolic risk factors. Many local mental health services around metropolitan Australia have established local metabolic monitoring policies and protocols, which are endorsed by the Royal Australian and New Zealand College of Psychiatrists (Lambert et al., 2017). In general, this involves (but is not limited to) the measurement of

parameters such as fasting lipids, fasting glucose, waist circumference, smoking status and blood pressure. Identification of abnormal results can lead to early intervention to reduce modifiable factors contributing to absolute cardiovascular disease risk. This in turn can reduce mortality from cardiovascular disease, which is one of the primary causes of premature mortality for people with serious mental illness (Castle et al., 2017; Happell et al., 2015; Harris et al., 2018). There is frequently a gap between detecting metabolic abnormalities and treating them. This is a critical success factor. The effort needs to be not just in measuring and monitoring but in treating the abnormal risk factor and checking that this is making a difference (as evidenced by a lowering of the targeted parameter).

In mental health clinics, compliance with metabolic monitoring for patients with serious mental illness is often incomplete. Clinics with dedicated clinicians assigned the responsibility of enhancing compliance with metabolic monitoring, or providing specialist preventative care input, have in the literature demonstrated better rates of metabolic monitoring uptake (Fehily et al., 2020; McKenna et al., 2014). However, practice and resourcing between different district or local area Mental Health Services can vary dramatically and there is no universal KPI to complete a minimum rate of metabolic monitoring. In rural Australia, there is a near absence of psychiatrists.

A barrier identified at the local mental health service level is that public mental health clinics tend to support consumers with the most severe mental illnesses. A number of social determinants of health (such as itinerancy and unstable housing, lack of familial/carer support, poverty) can greatly impact on the ability of these consumers to follow-up with investigations and treatment pertinent to their physical health. The aims of Being Equally Well would be furthered by enduring government support to address these pertinent social determinants of health.

Further issues arise from the confusion about roles and responsibilities of specialist healthcare providers when abnormal results are observed on screening tests. The EWG felt that the treatment and monitoring of diabetes, metabolic syndrome and cardiovascular disease is a role for general practitioners, rather than one that can be simply taken over by psychiatrists. Psychiatrists do play a key role in reviewing psychiatric medications that may be contributing to metabolic side effects, ensuring investigation results are communicated with general practitioners and referring on to other specialists as required.

Despite the barriers, there are models in which integration of care between GPs and mental health clinics works well. Of this the most pertinent example is the successful clozapine shared-care program. In this program, monthly medication prescription, haematological monitoring and physical assessment of consumers stabilised on clozapine occurs by the general practitioner, while a psychiatrist provides review and clinical oversight at least biannually. Successful linkages between primary and secondary care occur in this model through unambiguous protocols and clear delineation of roles and a dedicated point of contact (the clozapine coordinator) through which communication can be streamlined (Winckel & Siskind, 2017). The implementation of clozapine shared care programs across many parts of Australia has shown the potential for successful development of further integrated, shared care arrangements between primary and secondary care. Such partnerships can help toward the aim of reducing fragmentation and lack of coordination in the health system that act as major barriers to achieving the Being Equally Well aims.

3. Non-Government Organisations (NGOs)

A number of NGOs exist that specialise in the psychosocial and occupational rehabilitation of consumers with serious mental illness. The RANZCP expert consensus statement on the management of physical health advocates for early referral of people with serious mental illness to NGOs. Through NGOs, consumers benefit from the input of support workers and professionals from a multidisciplinary background. Individual clinicians and support workers can actively engage in health promotion, and practically assist consumers in attending appointments and undergoing investigations needed for the screening, assessment, intervention and monitoring of physical health issues.

Individual NGOs vary significantly in the geographic availability, intensity, format and scope of support that can be offered to consumers. There is no overarching regulatory framework governing the NGO sector as a whole that could lead to uniform policies and procedures and hence, practice remains variable.

4. Nurse Navigators

What has emerged from the EWG discussions is the realisation of the need to reduce the major barrier of a complex and fragmented health system as experienced by consumers with serious mental illness. The Gold Coast Integrated Care program has established a 'Nurse Navigator' service that is showing promise in integrating care between primary and secondary services for people with chronic or complex illnesses. It involves co-locating a senior nursing workforce with good knowledge of local services and systems in eligible general practices. Referrals to the service are coordinated through a single point of contact.

Nurse navigators tailor their approach to different consumers based on individual needs. They also have the capacity for outreach and hence flexibility in their treatment approach. They can assist with care coordination and navigation through different components of the healthcare system. Proactive follow-up of consumers after hospital admissions and liaison between different components of the mesosystem ensures that consumers do not fall through the gaps. Nurse navigators also play a significant role in coaching the consumer and supporting carers to empower them to become masters of their own health management (Spooner et al., 2019). Reviews of the nurse navigator system in the Gold Coast has demonstrated high levels of satisfaction from nurse navigators, general practitioners, consumers and practice nurses (McMurray et al., 2018).

Hence, the nurse navigators were felt in our forest metaphor to act as a vine binding and connecting together the otherwise siloed trees. The Nurse Navigator system is a potential model for integration and coordination in the mesosystem.

5. Allied health

Woven throughout the Mesosystem EWG discussions was the recognition of the important input that allied health staff can have in achieving the aims of Being Equally Well. This includes (but is not limited to) physiotherapists, exercise physiologists, pharmacists, social workers, psychologists and dietitians. The allied health workforce does not neatly fit into the mesosystem, due to the variable settings in which allied health practitioners are employed. Due to limited Medicare funding of allied health disciplines, most allied health appointments are accessed with out-of-pocket cost, except for some limited access through a GP Management Plan. For many consumers with serious mental illness, the financial barrier is significant. There can also be financial barriers to medication, such as gap payments required for nicotine replacement therapy.

Workforce shortages of allied health professionals in rural and remote Australia contribute to inequity in health.

The benefits of utilising a multidisciplinary team approach for the management of complex conditions such as metabolic syndrome, diabetes and cardiovascular disease are profound. The Mesosystem EWG felt there was a role for the Macrosystem EWG to consider advocacy around expanded Medicare funding of allied health in the management of physical health conditions for people with serious mental illness.

6. Peer workforce

Whilst some studies have failed to demonstrate a significant impact of a peer workforce with lived experience on improving physical health outcomes for consumers with serious mental illness (O'Connor et al., 2017); based on clinical experience, some members in the Mesosystem EWG felt that the peer workforce was often able to engage and empower consumers. The EWG felt that the evidence that a peer workforce can contribute to Being Equally Well was still in its infancy and there was scope for more research in the area (Dark et al., 2017; Stubbs et al., 2016).

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The Macrosystem: the policy levers to support sustained improvements in physical health care and outcomes

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Purpose

The Macrosystems expert working group considered macrosystem level recommendations to address the problems identified in the working groups of the BEW project. Within the scope of the Macrosystem expert working group was the actions of federal, state and territory governments, the Australian Health Ministers' Advisory Council (AHMAC) and National Mental Health Commission (NMHC) activities, and private health insurance.

Recommendations

The overarching objective of the Macrosystem expert working group was to consider mechanisms to achieve shared care: integrated mental and physical health care for people with a serious mental illness, where care is coordinated across different health services such that patients receive a continuum of physical health care to address their needs.

To achieve this objective, changes are required to enhance the effectiveness of: funding arrangements to compensate and incentivise shared care; service

models to structure and support the delivery of shared care; national and state governance arrangements of health service provision; and training to establish a workforce equipped to meet this need.

The policy actions that are required are:

- Implement a model of shared care, where care for mental and physical health is integrated across the health sector
- Establish a national data system to measure and improve the physical health of people with SMI
- Develop and implement a national advocacy campaign to promote awareness of the poor physical health for people with a serious mental illness and address stigma
- Reorient the system towards integration of mental and physical health care by providing training and education

Problems

- There is a pervasive lack of integration and clear communication channels across health care services within and across the public and private sector, leading to difficulties for both consumers and health care professionals in navigating the system (Firth et al., 2019)
- The current data system is not set up to measure: (1) the extent of the poor physical health of people with SMI and (2) the success of any implemented corrective measures
- Mental health stigma negatively impacts physical health care, both in terms of self-stigma and stigmatised views of health care providers, contributing to issues such as diagnostic overshadowing (where physical health symptoms may be wrongly attributed to mental health symptoms) (Firth et al., 2019; Sickel et al., 2019)

Evidence

Shared care leads to improved physical health outcomes: The make-up of shared care models to coordinate physical and mental health treatment may vary, including elements such as clear communication channels between different providers, coordinated multidisciplinary care to address all health needs of a patient, and integrating mental health in primary care (Firth et al., 2019; Thornicroft et al., 2019). While there remains a need for high-quality studies examining the effectiveness and cost-effectiveness of shared care models for physical and mental health, there is sufficient evidence to advocate for improved care integration to improve quality of care and patient physical health outcomes (Butler et al., 2008; Fitzpatrick et al., 2018; Thornicroft et al., 2019).

A model of shared care is currently in place for patients with SMI prescribed anti-antipsychotic medications, such as clozapine. These patients receive proactive physical health monitoring, where their health professional (typically a GP) is required to regularly monitor adverse physical health effects and overall health (Winckel & Siskind, 2017). Elements of shared care include agreed protocols for monitoring, prescribing responsibilities, and treatment of any adverse effects. Ongoing communication between GPs and the patient's health providers (mental health case manager, non-government organisations) is essential. Studies have reported that anti-psychotic treatment (including clozapine) is consistently associated with lower mortality rates compared to no such medication; seemingly inconsistent with the known adverse physical health effects of these medications (Taipale et al., 2018; Taipale et al., 2020; Tiihonen et al., 2009). This finding may be contributed to by numerous factors, including improved psychiatric symptoms (leading to improved lifestyle), greater utilisation of health care services, and long-term engagement in treatment (Taipale et al., 2020).

National registries enable timely data collection and evaluation to improve quality of care: Quality data is essential to both measure the extent of a problem and to monitor progress in working towards improvements. Population-based clinical registries have been developed internationally that enable capture and analysis of data in a timely manner. Evidence supports that clinical registries are useful to monitor quality of care, benchmark performance and describe treatment patterns; leading to significant and cost-effective impacts on quality of health care and health outcomes (Hoque et al., 2017; Lee et al., 2019). For example, the ANZDATA (Australian and New Zealand Dialysis and Transplant Registry) enables benchmarking for quality of care in renal replacement therapy. Data is used to influence health service planning, development of safety and quality programs, and research projects (McDonald, 2015).

National advocacy campaigns positively impact public perceptions and behaviours: There is evidence for the effectiveness of mental health promotion campaigns in reducing stigmatising attitudes (Luty et al., 2007) and, more broadly, for health promotion campaigns in encouraging healthy behaviours (Wakefield et al., 2010). National advocacy campaigns to specifically address the physical health of people with a mental health condition have been implemented in the UK ('Making Parity Reality') (Royal College of Nursing, 2019) and the USA ('Mind/Body Health Public Education Campaign') (American Psychological Association, 2009). In Australia, the 'Act-Belong-Commit' mental health

promotion campaign is an example of a campaign which led to increased awareness of mental health and positive actions in the public to improve mental health, including being more physically active (Anwar-McHenry et al., 2012).

Education and training for health professionals is an effective supplement to other measures: Cochrane systematic review evidence supports the effectiveness of health professional training and printed educational materials in facilitating clinical practice change. However, when implemented alone, these strategies may lead to only small changes, particularly when the target behaviour is complex (e.g. requiring complex judgement or involving multiple professionals) (Forsetlund et al., 2009; Giguère et al., 2020). In hierarchies of effective intervention strategies developed for patient safety, clinician education has been ranked as having lower leverage (Henriksen et al., 2008), suggesting that these strategies should be implemented in conjunction with additional strategies.

Proposed policies

Informed by the available evidence, the Macrosystem expert working group proposes four recommendations to improve the physical health of people with serious mental illness:

1. Implement a model of shared care that integrates mental and physical health care

Implementing a model of shared care is a critical step to overcome barriers to consumers accessing and receiving appropriate care for their physical health. At a minimum, it would include clear channels of communication between health providers and, ideally, would include structured multidisciplinary care (Firth et al., 2019).

To improve coordination between different levels of health care and allocate appropriate responsibility, the enhanced care coordination provided to people taking antipsychotic medication should be scaled up and implemented for all people with SMI. This model involves the health system taking responsibility for proactive physical health monitoring, multidisciplinary coordination of care, facilitating attendance to physical health checks, and ensuring care plans are followed through. Primary care is an appropriate setting from which to implement a coordinated approach to care as it is the key access point to the health service system for the majority of people with a mental health condition (Mai et al., 2010). A key element would be coordination between primary care and other health providers, including specialist

public mental health services, the private sector, pharmacists and allied health professionals, and non-government organisations. This model of care should appropriately acknowledge that people with SMI may access both public and private care, and that physical health care should be coordinated across these sectors.

a. Improved funding models to compensate and incentive shared care

Funding improvements are required to properly compensate and incentivise provision of shared care. There are current approaches in general practice that could be amended to include a component that addresses the physical health concerns of people with SMI. For example, GP Mental Health Treatment Plans (GPMHTP) could be modified to include an additional, specific focus on physical health. Alternatively, GP Management Plans (GPMP) could be bundled with mental health plans as a package. These are minor and affordable tweaks that would acknowledge the time needed to address the physical health of people with a serious mental illness.

Within general practices, there is need for specialist allied health support (e.g. from an exercise physiologist or dietitian). This could either be through funding additional roles within primary care (e.g. embedding an exercise physiologist in primary care services) or through implementing initiatives that would facilitate consumer access to appropriate health services (e.g. navigation support; enhanced care coordination).

Funding is also needed to support continuing professional development for health professionals to support the implementation of shared care. Training and education should be offered to upskill health professionals to work in multidisciplinary teams. This training could be offered by relevant organisations such as the Mental Health Professional Network, the Royal Australian College of General Practitioners, and the Royal Australian College of Psychiatrists.

b. Shared care as a feature in the integrated guidelines

There is an array of guidelines available to guide provision of physical health care to people with SMI. A set of integrated guidelines should be developed as part of BEW that synthesise the available guidelines to create one, overarching guideline for health professionals in the provision of physical health care for this population. This set of guidelines would also establish the importance of

coordination between health services, considering the physical health care needs of people with SMI. This will provide clarity around the multidisciplinary principles for shared care. Health services should be incentivised to use these guidelines through the funding packages made available.

c. Future research directions

Research should continue to explore the effectiveness and cost-effectiveness of shared care models. Little research has looked over time and across service barriers. Additionally, non-government organisations have a growing role in mental health care provision and have enormous potential to be providing physical health care and coordination with other health services (Australian Institute of Health Welfare, 2019). Research is needed to inform how a model of shared care would incorporate NGOs. A list of priority areas for future research to be considered by research funding bodies are contained in Note 1.

2. Establish a national data system to support the physical health of people with SMI

An Australian national data registry is needed to create a national system to capture and report on measures of the physical health of people with SMI. Such a registry would provide state and national key measures for improvement of physical health of people with a mental illness, linking to recommendations from the Consumer and Carer working group. It is recommended that the registry be consumer-centred, ensuring the physical health care provided is leading to improved outcomes for consumers. The registry should be created at a national level to develop a national platform and maximise ability to inform policy and practice. It is recommended that Equally Well Australia oversee the registry, given its consumer representation and support from numerous organisations.

Benefits for patients and health practitioners would be improvements in quality of care and management, therefore leading to improved health outcomes. A registry would also inform research and evaluation in this area by identifying areas of priority focus. Establishing a national registry would enable annual reports on performance and monitoring of progress of corrective policy actions.

Design of the registry will need strong involvement from all key stakeholders. This should include consumers and carers, particularly to consider privacy concerns. Patients could be entered in the registry when they enter from any point of the

health system (e.g. in contact with a GP, hospital or specialist mental health care). Entry of data into the registry would be maintained by their current service provider, to monitor improved outcomes (e.g. mortality) and quality of care. To continue to incentivise shared care, participation in the registry could be supported by a specific practice payment recognising additional practice activities and time involved. Some key considerations for the development of a national registry are presented in Note 2.

3. Develop and implement a national advocacy campaign: equal mental and physical health

A national advocacy campaign represents a necessary step to increase awareness of the poor physical health of people with a mental illness and aid in reducing stigma. A number of campaigns should be developed to target different population groups, including: the general population, people with a SMI and health professionals. Co-development is essential, seeking input from all key stakeholders including consumers, carers and health professionals regarding what the content of the campaigns should be. General recommendations include that the content would need to be appropriately broad in order to maximise reach. The content should be tailored appropriately for each audience, for instance, encouraging access to physical health care for people with SMI, promoting equal value of mental and physical health care for health professionals, and reduction of stigma for the general public. The overarching message should be one of 'parity of esteem': equal value of mental and physical health.

A focus on the key risk behaviours of preventable chronic disease is recommended, due to their modifiable nature, including: tobacco smoking, poor nutrition, harmful alcohol consumption and physical inactivity (Stanaway et al., 2018). The campaign should use a targeted approach, being specific to the issue of the poor physical health of people with a SMI, rather than taking a general approach to impact physical health in the general population. This targeted approach is recommended due to the lack of effectiveness of previous public health strategies specifically for people with a mental health condition (Szatkowski & McNeill, 2015).

4. Reorient the system towards integration of mental and physical health care by providing training and education for health care professionals

To support the recommendations outlined above, training and education of health care professionals will be essential to support a culture shift that acknowledges the equal importance of mental and physical health. As acknowledged in Recommendation 1, training should be focused on shared care, supporting health professionals to coordinate physical health care provided to people with a serious mental illness. Training and education measures should be implemented to support (not replace) the other key recommendations contained in this report.

Feedback from the Consumer and Carer working group has emphasised the need for health professionals to have clear conversations with both consumers and carers about physical health and potential metabolic side-effects of psychiatric medications. It is crucial that professional colleges (RACGP, RANZCP) and training bodies support education for health professionals in physical health monitoring and guideline-based prescribing. For currently practicing health professionals, continuing professional development should similarly feature topics on the importance of addressing physical health.

Discussion

The Macrosystem Group report has focused on the mechanisms to integrate treatment for the physical and mental health needs of people with SMI across the health sector. There is clear evidence that shared care leads to improved health outcomes. Implementing a model of shared care for all people with SMI that includes proactive physical health monitoring (typically provided to patients taking antipsychotic medications) will require funding improvements, clear guidelines regarding multidisciplinary care and continued training for health professionals. The establishment of a national data registry for the physical health of people with SMI will enable benchmarking of quality of care, introduce accountability, and allow monitoring of progress as recommendations are implemented. A national advocacy campaign would promote equal physical and mental health care, reduce stigma, and increase public awareness. To continue research efforts towards improving the physical health of people with SMI, a list of priority areas for future research are outlined in this report.

Note 1: recommendations for areas of research for priority funding

The following research questions were identified by the Macrosystem expert working group as current evidence gaps. It is recommended that these research questions should be considered as priority areas of research by the Medical Research Future Fund.

1. Are peer workers effective in supporting people with a serious mental illness to improve their physical health?
2. What are the effective mechanisms to enhance co-operation and integration across state, federal and private systems, including the NGO sector?
3. What is the cost-effectiveness of mechanisms to improve service integration?
4. What is the evidence for metabolically safer psychiatric medications, mechanisms to reduce metabolic side effects, or both?

Note 2: Considerations for development of a national registry

The following recommendations were synthesised following a series of meetings with content experts: Professor John McNeil and Professor Jeremy Oats.

1. The three key ingredients for a registry are:
   a. minimum dataset (brief),
   b. method of systematic ascertainment of outcomes, and
   c. clear definition of who is eligible for the registry.

2. Overall, the design of the registry should be kept simple. Existing clozapine registries may provide a basis to inform its design.
3. Most registries would start with a pilot. Involve a few interested sites and employ limited data collection to check the methods.
4. Need to consider privacy and the views of consumers and carers.
5. Continual communication is essential: ensure people entering data are kept informed as to why they are collecting the data and the outcomes.

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Quality Improvement: measures and models for improved physical health care and outcomes

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Purpose

1. To identify how new ways of working by the front line teams can be facilitated by meso-level services support.

2. To identify Quality Improvement strategies and models that would enhance the health services provided for people.

Recommendations

- Collaboratives are recommended to implement existing clinical guidelines which are based on systematic reviews of the evidence.

- Practice registers should be used for recalling patients, prompting better care of physical health, and evaluating progress towards equity making best use of measures already recorded as part of Practice Incentives Program Quality Improvement (PIP QI).

- System-level registries; state or commonwealth based initially on models currently in use, will record morbidity and mortality to allow monitoring of progress towards equity of outcomes for people with serious mental illness.

- The registered data (individuals, measures, including patient-reported measures and social determinants) should be practice/service or system-specific.

- Continuous governance and leadership must be established at every level to ensure evaluation, progress, and ongoing quality improvement.

Problems

- Given the mortality gap and morbidity rates for people with serious mental health conditions, there is a need for quality improvement measures to support primary and secondary care providers and to reduce the time to bridge the gap between evidence and practice in clinical care. This requires practical and easy to use clinician measures, patient reported measures, process and access measures and indicators of social determinants to identify what matters to consumers with measures that are reportable.

- Issues to be managed include consumer enablement and how to ensure that Quality Improvement is pragmatic, continuous and supports consumer and workforce capability. This indicates the need for system-wide but practice-specific and applicable monitored registries focused on improvement of measurable outcomes.

- Good work has been done before, but not then implemented systematically. There is need for data driven improvement models and evaluation (e.g., stratified based on risk factors such as comorbid disorders) that include incentives for all stakeholders (patients and providers) to engage in improvement practices and supports and that provide system managers and funders with evidence of effectiveness and improved outcomes.

- The lack of an adequate, additional specialised workforce, such as mental health nurses to support patients through their engagement with health services and increase participation.

Evidence

In Australia and around the world, health care Collaboratives have been used to improve patients' outcomes across care settings (Healthcare Improvement Scotland; Wells et al., 2018). Quality Improvement Collaboratives actively bring together groups of practitioners from different organisations to meet and learn about a specific aspect of health service quality and to share experiences about making changes in their local settings. The process specifically supports practitioners to use QI tools such as Plan-Do-Study-Act (PDSA) cycles to achieve improvements (Hespe et al., 2018). A systematic

review of 64 Quality Improvement Collaborative programs in 2018 reported significant improvements in 83% of targeted clinical processes and patient outcomes (Wells et al., 2018). Collaboratives have been successfully used in Australia for heart disease and diabetes prevention; two of the main contributors to health inequities among people with serious mental illness (Ford & Knight, 2010; Knight et al., 2012). Evidence supports the use of Collaboratives to improve patient-related outcomes, cost-effectiveness, and work-force satisfaction. In primary and secondary care, Collaboratives could deliver specific process improvements in short time frames and allow for peer-learning and internal and external engagement based on common objectives. Further information, examples of successful Collaboratives, and other related documents are in the discussion paper at Appendix D (Volume 2; p.23) (Fitzpatrick, 2021).

Sustainable Quality Improvement Collaboratives have been suggested as cost-effective (De La Perrelle et al., 2020; Wells et al., 2018). For example, a Diabetes Care Collaborative in the Netherlands reported that incremental costs per quality-adjusted life year were approximately AUS$3000 for men and AUS$2700 for women in comparison to usual care (Schouten et al., 2010). The recent Productivity Commission Mental Health Report identified reducing the gap in life expectancy for people with severe mental illness as one of the priority reforms (Productivity Commission, 2020). Therefore Collaboratives must be prioritised. The current burden of serious mental illness is substantial with an increased risk for metabolic conditions, such as cardiovascular disorders or diabetes, and a chronic disease-related mortality gap between those with and without mental health disorder is approximating 20 years (Firth et al., 2019). Previous Collaboratives demonstrated substantial improvements in patient-related outcomes, such as reductions in adjusted mortality rate, cardiac arrest rate, and self-harm in acute mental health settings (Healthcare Improvement Scotland, 2018).

Proposed policies

The group discussed several practice improvements from both primary and secondary care perspectives, including the following:

- The identification of measurable indicators, including of outcomes, processes, and consumer-driven measures (Shah, 2019). From the primary practice perspective, these measures should also include a proportion of patients with comorbid presentation. It would then be important to connect these measures with measures of clinical improvement, including those currently utilised

and supported by incentives such as PIP QI. The final set of the recommended measures should be established by the expert working group. Priority areas for change and impact could be identified using Model for Improvement, via a process involving main stakeholders (consumers, carers, practitioners) and based on patient's risks/needs.

- Formation of a National Equally Well Collaborative that follows the previously successful model, IHI Breakthrough Collaborative. The model uses a short-term (6-15 months) system uniting cross-care settings with a common goal. It involves the following steps:

  - **Formation of an Expert Panel:** to write the handbook with the aims, measures, and ideas for improvement for that Collaborative.

  - **Three face-to-face learning sessions:** to build staff understanding, experience, morale and to consolidate system design.

  - **Monthly webinar reviews of process during action periods:** to share data and learnings.

  - **Regular coaching and advice:** provided by experts to build capacity, capability and ensure sustainability (Institute for Healthcare Improvement, 2003).

The enrolled practices/teams would be supported by an Equally Well Collaborative Improvement Team to facilitate their participation in the Collaborative.

Previous successful Collaboratives in NSW, such as National Perineal Tears Collaborative and NSW Falls Prevention Collaborative, have used Quality Improvement Data System (QIDS) to improve the quality and safety of health service delivery. Further information on QIDS is available in the discussion paper at Appendix D (Volume 2; p.23) (Fitzpatrick, 2021).

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FINDINGS AND RESULTS

Thematic analysis of working group discussions

The Roadmap is a united voice of consumers, carers, clinicians, policy makers, and researchers.

Integrating perspectives

The first round of meetings revealed the different starting points and the varying 'knowledges' between the working groups. These differences reflected the frustration of carers and consumers with the shortcomings of the mental health system overall, whereas the professionals were focused on the narrower scope of the system level they were considering.

To illustrate, participants in the Consumers and Carers group were concerned about the negative impact of antipsychotic medication on their lives, including on their physical health. They felt strongly that clinical responsibility for medication management was often unclear, and that little attention was given to the

provision of accurate information about the risks and benefits of medication and the importance of informed consent. The group considered that prescribers should take responsibility for and monitor consumers' health in response to medication management, and listen to the concerns of consumers. They identified a lack of trust in mental health services based on their negative experiences. There was a view that this lack of trust contributed to the marginalisation of large numbers of people with SMI as a result. The consumers and carers asserted the need for a holistic approach by services, at primary, secondary and tertiary levels, in which physical and mental health needs were addressed seamlessly.

The professional groups in response proposed several innovations that they considered would or could rapidly improve physical health outcomes for this group. Structural support roles such as peer workers or 'nurse navigators' to help manage transitions within and between services gained support among the professionals. These would be supported by new data collection systems, including practice-based registers and regional registries to enable services to identify those with mental and physical health needs,

Top 15 themes in Round 3 discussions across groups -
showing incidence of themes in each group and total
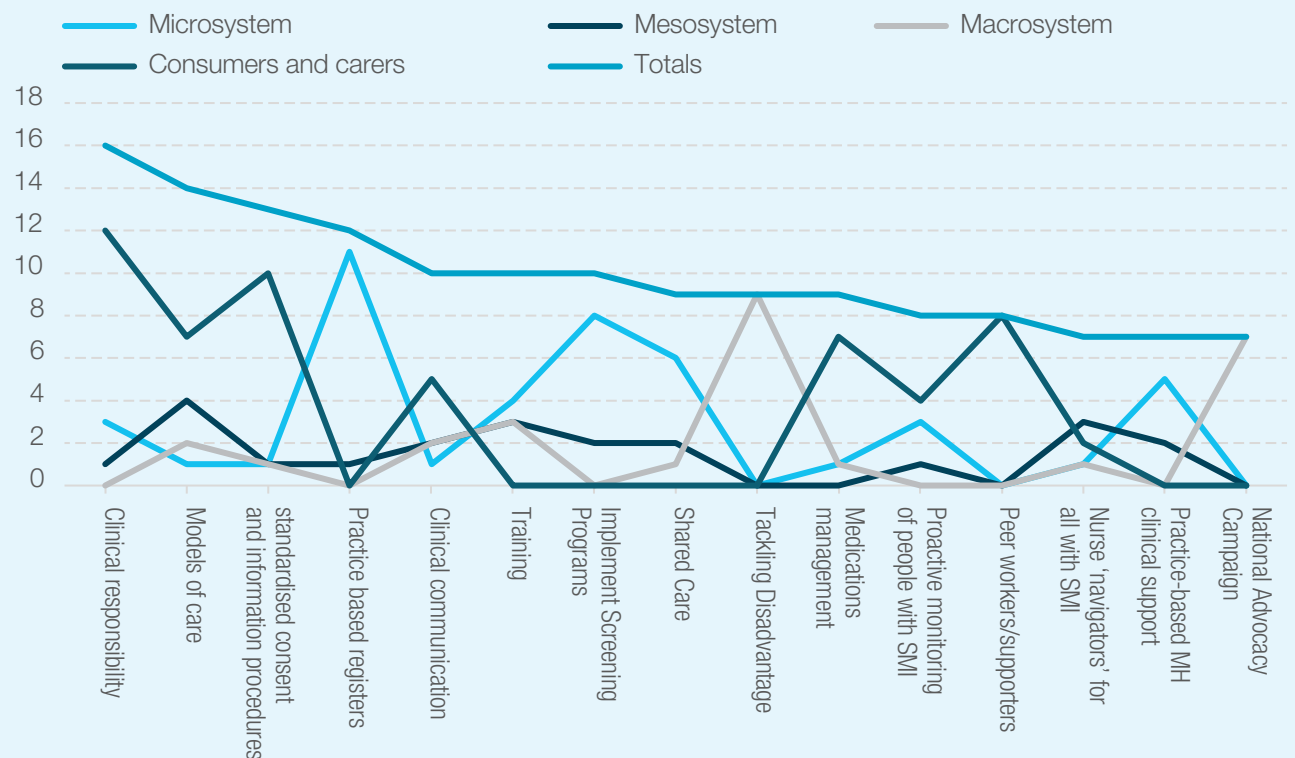
Chart 1. Top 15 themes in Round 3

including those on antipsychotic medication and to enable proactive recall, screening of risk factors and support with risk factor reduction. The potential of formal quality improvement processes including practice-based collaboratives was highlighted in these discussions. The groups identified in detail a model of shared care and supporting infrastructure which built on existing evidence but would amplify existing good practice to meet the desired objectives systematically.

The joint meeting of clinical group chairs with the Consumers and Carers working group proved pivotal. The thematic analysis commenced at this time to ensure that the conversations in each group were recorded in detail (through analysis of recordings of all meetings held) without potential loss or bias in summary notes and presented in accessible ways which demonstrated clearly emerging areas of convergence and divergence requiring reconciliation as the process evolved. Chart 1 demonstrates the beginning of an alignment of top priorities after this meeting.

The evolution of priorities

The thematic analysis shows a strong movement towards convergence between the micro, meso and macro-system groups regarding the proposed models of care linked to the concerns and the success measures provided by consumers and carers and described in Figure 3.

As the work progressed there was an increasing focus on developing the detail of a shared care model to address the complex needs of people with physical and mental illnesses. This included identifying the changes required at all levels within clinical systems to make a shared care model feasible and effective.

The groups considered:

- funding
- incentives
- training and workforce development
- clinical responsibility
- the need for adequate data collection processes
- systems to monitor outcomes at GP, PHN and state or national levels
- the research agenda

Evolving focus of discussions over time

Systems problems:
- Stigma/discrimination
- Affordability
- Lack of trust/poor experiences
- Impact of medications on physical health
- Fragmented system

System fixes:
- System navigators
- Peer workers
- Models of care

Round 2 discussions

Joint meeting of Consumer/Carer group with Group Chairs
- Impact of medications → clinical responsibility
- How to link separate mental and physical health systems, primary and specialist care
- Shared decision-making and informed consent

System problems:
- Tackling complex needs
- No links across the systems

System fixes:
- Practice based registers → screening programmes
- Clinical communication
- QI Collaborative

Round 3 discussions

Round 4 discussions
- Framing the right recommendations
- 'Translation' between groups
- The challenge of implementation

Figure 3: How the focus of discussions changed over time

As discussions continued, the emphasis became how to achieve the required systemic change at scale, to ensure sustainable shifts in outcomes and experiences. There was a strong intention to avoid the unintended generation of additional inequalities of access and outcomes through geographical variations and bar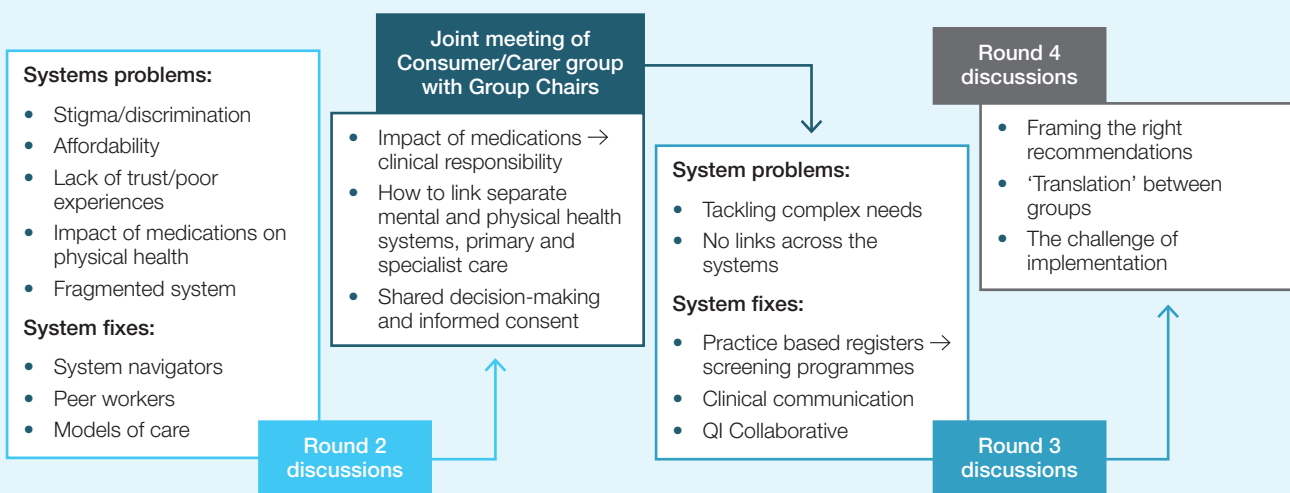riers to access for harder to reach individuals and communities. Figure 4 (word cloud) shows the mapping of the key statements and themes and the frequency with which they occurred within and across all groups that resulted from the thematic analysis after the third round of meetings.

Achieving consensus through mutual understanding

The thematic analysis added value to the *Roadmap* development by enabling detailed information sharing between groups; presented in accessible, graphical formats. This enhanced the transparency of the working process and enriched the discussions by enabling groups to hear and consider the reactions of the others to emerging proposals. By the fourth round of meetings, overarching priorities were visible across the groups. This is illustrated in Chart 2.

Emphasising implementation

During the fourth and final round of meetings, discussions moved beyond describing the changes required to considering the challenges of implementation. The thematic analysis showed the

determination of the groups to ensure that their work would not culminate in a report that 'sits on a shelf' and that there must be meaningful change. Figure 5 shows the word cloud of themes at this final stage.

The project also held an open cross-group meeting at the conclusion of all meetings to consider the thematic analysis outcomes and to further consider the recommendations. Notes from this meeting provided the following additional insights:

1. The *Roadmap* is a united voice of consumers, carers, clinicians, policy makers, and researchers.
2. The frustrations with the *status quo* and agreement about suggestions for change are shared across the entire system.
3. A focus on 'saving lives, saving money' would galvanise efforts to combat the problem of reduced life expectancy with a new sense of urgency: Every day, 28 Australians living with mental illness die prematurely due to chronic physical disease.
4. Measures of improvement need to be evidence-based and measure what is important to consumers, carers and clinicians. There must be an ongoing measuring system (and incentives) with frequent data collection over time that is publicly reported.

Top twenty issues in discussions of recommendations -
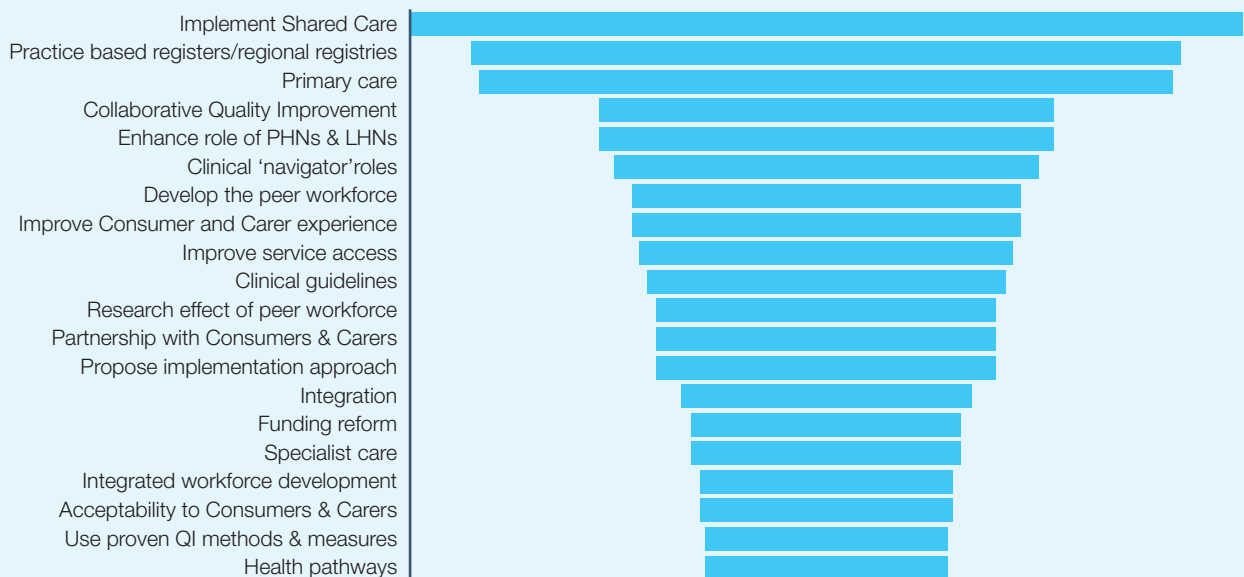### number of excerpts tagged with these themes

Chart 2. Top 20 issues in discussions of recommendations

Figure 4. Word cloud of themes across all groups after round 3 discussions

Figure 5. Word cloud of themes from 4th round discussions: framing recommendations

RECOMMENDATIONS AND MEASURES OF SUCCESS

This section shows how the themes that emerged during the diagnostic and mapping phase of the project were used to develop recommendations which match consumer aspirations with evidence-based enhancements, adjustments and additions to current health service and system arrangements.

Working groups' recommendations are consumer-orientated, interrelated and comprehensively describe the essential components of an improved system or care. They are mapped against the criteria of success described by consumers (Table 2).

Microsystem recommendations

- Use existing clinical guidelines (RACGP and RANZCP) to develop protocols for managing physical health of people with serious mental illness within formal Shared Care Arrangements using living registers in each clinical setting to keep track of patient-care processes.

- Invest in a community mental health nurse workforce (nurse navigators) embedded in GP clinics to support care navigation, case management, lifestyle coaching and engagement with carer, community and peer supports.

- Implement existing medication-choice guidelines and frequent, planned reviews to minimise the physical harms associated with psychiatric medications engaging the patient's mental health clinicians, GP and pharmacist.

- Optimise the use of routinely collected clinical information and computer decision support within general practice to achieve quality improvement towards equitable physical health for patients with serious mental illness.

Mesosystem recommendations

- A live data sharing platform should be created to improve communication and enhance shared care arrangements between different components of the mesosystem. Primary Health Networks (PHNs) could oversee the coordination, rollout and maintenance of such a platform. A practice-based register of consumers with serious mental illnesses should be established that would enable an automated recall and alert system to try and improve the regular uptake of screening and monitoring investigations and health checks.

- Some process measures are reported to PHNs by practices. These measures should be the basis for quality improvement coordinated by PHNs.

- A new workforce of practice-based 'Nurse Navigators' should be created to assist consumers in navigating a complex and fragmented health system across different levels of healthcare. Further roles will include the empowerment and upskilling of consumers and their carers in managing their own health conditions. The nurse navigator system already successfully implemented in the Gold Coast Integrated Care Program can serve as a blueprint for wider implementation across the country (McMurray et al., 2018; Spooner et al., 2019).

- PHN performance data should be shared in a transparent manner with all stakeholders in order to improve clinical performance, to quantify the significant variation in performance between PHNs and to enable targeted support and funding to reduce these disparities. This will be a step toward better utilising the currently existing PHN framework to achieve better physical health outcomes for people living with serious mental illness. Transparency of performance metrics can ensure that funding is appropriately utilised and that services commissioned remain cost effective.

Macrosystem recommendations

The policy actions that are required are:

- Implement a model of shared care, where care for mental and physical health is integrated across the health sector.
- Establish a national data system to measure and improve the physical health of people with SMI (National Clinical Quality Registry).
- Develop and implement a national advocacy campaign to promote awareness of the poor physical health for people with a serious mental illness and address stigma.
- Reorient the system towards integration of mental and physical health care by providing training and education.

Quality improvement recommendations

- Collaboratives are recommended to implement existing clinical guidelines which are based on systematic reviews of the evidence.
- Practice registers should be used for recalling patients, prompting better care of physical health, and evaluating progress towards equity making best use of measures already recorded as part of Practice Incentives Program Quality Improvement (PIP QI).
- System-level registries state or commonwealth (Clinical Quality Registries); based initially on models currently in use, will record morbidity and mortality to allow monitoring of progress towards equity of outcomes for people with serious mental illness.
- The registered data (individuals, measures, including patient-reported measures and social determinants) should be practice/service or system-specific.
- Continuous governance and leadership must be established at every level to ensure evaluation, progress, and ongoing quality improvement.

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Table 2. Consumers' and Carers' measures of success mapped to recommendations by system level responsibility

Consumers and Carers: what success looks like	Microsystem	Mesosystem	Macrosystem	Quality Improvement
Physical health outcomes				
Good quality of life/able to keep on top of SMI/living long healthy lives. Can have physical health checks and treatment swiftly and effectively. Long term success would be reducing the life expectancy gap between people with SMI and the rest of the population to zero. **Recommendations:** • Provide people with serious mental illness with affordable access to general practitioners, other primary health care and peer workers • Establish independent consumer and carer co-designed and centred national service audit scheme	Recall, review and management in GP of risk factors for CVD, diabetes and cancer. Smoking rates, cholesterol, blood pressure and HbA1c levels used to calculate changes in CVD and diabetes risk at the population level.	PHNs aggregate risk factor measures from GPs. Risk factor returns from GPs linked to GPs' Medicare payment.	Funding for: • Annual national morbidity and mortality report. • National, state and territory Clinical Quality Registries • Collaboratives for: • Primary Care and Mental Health services • Nurse Navigator roles • GP (Medicare) shared care support payments • Research and evaluation program Develop and implement a national advocacy campaign to promote awareness of the poor physical health for people with a serious mental illness and address stigma.	Annual national morbidity and mortality report to the Australian Health Council. National, state and territory Clinical Quality Registries. Aggregated GP data on changes in risk factors used to calculate change over time in risk of CVD events and consequences re diabetes. Collaboratives to develop and monitor: • Patient registers • CVD, diabetes and cancer risk factor reduction and screening • Good prescribing • Shared care between GP and mental health services • Role of nurse navigators
Medication impacts				
Recognition of harmful impact of medications with other options prioritised. Clinicians understand the person first, not the diagnosis – resisting medication as a first option, listening and acting on what the persons says – a person's agency or motivation comes when the person's focus is addressed. When medications are necessary health professionals and services recognise the effects of the medication. Recognition that the medication, not necessarily the illness, makes people susceptible to unhealthy lifestyles.	Use of guidelines and shared care protocols developed between GP and mental health services. (based on Positive Cardio-metabolic Health algorithm (Curtis J. et al., 2011)). Role of pharmacists in medication reviews and support services to be encompassed.	Facilitate guideline and shared care protocol implementation by PHN/LHNs.	Dissemination of guidelines and shared care protocols developed for GP and mental health services to be funded through MBS. Approval by TGA of Metformin use in treatment of Metabolic Syndrome. Priority research funding into evidence of metabolically safer psychiatric medications and mechanisms to reduce metabolic side effects.	Good prescribing practice disseminated and patient outcomes measured by Collaboratives.

Table 2. Consumers' and Carers' measures of success mapped to recommendations by system level responsibility

Consumers and Carers: what success looks like	Microsystem	Mesosystem	Macrosystem	Quality Improvement
Medication impacts				
Recommendations: • Provide incentive support for general practice to engage in comprehensive mental and physical health care including: - shared care with treating psychiatrists and/ or specialist general physicians - independent access to non-treating psychiatrists and/or specialist general physicians for treatment review and advice • Ensure informed consent is integral to ongoing medication management of serious mental illness.				
Relationship with health professionals				
Have good, trusting relationships with treating practitioners, particularly their GP. A relational recovery approach as well to address impacts of trauma. Clinicians understand the person first, not the diagnosis – resisting medication as a first option, listening and acting on what the persons says. A person's agency or motivation comes when the person's focus is addressed. Clinicians listen and believe individuals when they express concern about their physical health and act on it. **Recommendations:** • Ensure informed consent is integral to ongoing medication management of serious mental illness • Peer worker integration in primary health care with MBS funding		RACGP and RANZCP joint Continuing Professional Development program.	Funding for: • Development and implementation of a national advocacy campaign to promote awareness of the poor physical health for people with a serious mental illness and address stigma. • RACGP & RANZCP Continuing Professional Development program.	

Table 2. Consumers' and Carers' measures of success mapped to recommendations by system level responsibility

Consumers and Carers: what success looks like	Microsystem	Mesosystem	Macrosystem	Quality Improvement
Navigation support, quality of care and equity of access				
Can have physical health checks and treatment swiftly and effectively. Have support including from peer support roles to navigate the system for both mental and physical health. Have access to what they need: accessibility, availability and affordability are key for both carers and consumers. Tailored motivational strategies for people with SMI to be physically healthy. **Recommendations:** • Peer worker integration in primary health care with MBS funding. • Consumer-informed engagement and support initiatives to reach out to people with SMI who do not engage with primary health care. • Provide people with serious mental illness with access to peer and professional support to navigate health and social services, education and employment.	Register and recall in General Practice. Practice-based nurse navigators linked to GP engagement in care and support for patients with SMI. Nurse navigators providing care coordination and access to community based programs for smoking cessation, physical activity, weight loss and diet.	PHNs aggregate risk factor measures from GPs. Risk factor returns from GPs linked to GPs' Medicare payment.	Medicare funding for GP SMI package of care. Establishment of and funding for Nurse Navigator workforce. Priority funding for research into: • effectiveness of peer workers in supporting people with SMI to improve physical health • effective mechanisms to enhance cooperation and integration across state, federal and private systems including NGO sector • cost effectiveness of mechanisms to improve service integration.	
Peer support and integration of lived experience				
Recommendations: • Peer worker integration in primary health care with MBS funding. • Establish independent consumer and carer co-designed and centred national service audit scheme.			Clinical trial of the efficacy of peer support for risk reduction through MRFF. Establishment and ongoing support for national, state and territory clinical quality registry review groups. Input to annual national report on morbidity and mortality.	Participation in national, state and territory clinical quality registry review groups. Input to annual national report on morbidity and mortality.

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A consumer's experience

I experienced severe trauma including sexual abuse during my early childhood and teenage years. I spent two years in a children's hospital undergoing tests, operations and treatment. I was constantly afraid and lonely as I was away from my rural home and family.

I first considered suicide when I was 10. From the age of 14 I started hearing voices and feeling constantly afraid. I did have short periods of excitement, energy and feelings of self-confidence but these were followed by deep depression and suicidality. I was placed on antidepressants for a short while in my twenties by a general practitioner, however, they made me feel very unwell and I ceased taking them. I was a long distance runner and committed to my fitness; I did not want to take any medications.

In my mid-thirties, after an extensive period of debilitating depression, I was diagnosed as having bipolar schizoaffective disorder. A Community Treatment order meant that I was forcibly placed on lithium and had short periods of taking antipsychotics and later antidepressants. Previous to psychiatric treatment, I had never hurt anyone or caused any major disruption in the community, so how was this harmful treatment justified?

Within two months of being placed on lithium I had put on 22 kilos in weight and experienced continual tremors in my hands and legs. Over time my physical health declined but psychiatrists were determined that managing my mental health was a priority over my physical health. I had no say in this. The weight gained and the terrible feelings lithium gave me were of no consequence and I observed the GP felt he 'had to' acquiesce to the psychiatrist's view, even though blood tests indicated that the lithium was negatively impacting my thyroid, liver and kidneys along with increased disabling neurological effects from the impact of the medication. I became pre-diabetic and struggled with continuous discomfort in my joints, feeling constantly exhausted, like I was walking through wet concrete and had a terrible feeling of heaviness and fog in my brain and behind my eyes. My memory and executive functioning was negatively impacted and I suffered from terrible insomnia.

My health continued to decline over 20 years but I was required to continue use of psychiatric medications. This was never questioned by GPs. My physical health seemed unimportant so long as I was a 'compliant' citizen.

In my mid 50s I moved to a rural area. My new GP expressed concern for my physical health and referred me to a general physician. After weeks of tests my physician concluded that my physical health had reached such a poor standard that he advised me that I should cease taking psychiatric medications. He gave an undertaking to support me through the process of weaning off lithium and staying out of hospital even if my mental health declined.

I was fearful of becoming mentally unwell and being forced back into hospital and back onto psychiatric medications. We thought it was likely that I would become unwell as a rebound affect but that I needed the opportunity to go through that stage without psychiatric intervention.

The general physician also supported me to start using medical cannabis oil (CBD) to manage the neurological symptoms that he and a professor of neurology considered had been caused by the lithium. After only 4 days on the medical cannabis, the severe tremors settled down. Without the medical cannabis my neurological condition has rendered me quite disabled. We hoped that stopping lithium may stop the unwanted neurological effects, however, this has not proved to be the case. The neurological condition has effects similar to symptoms of both Parkinson's and Multiple Sclerosis and without the CBD oil I am severely disabled by the tremors, lack of control over my hands and eyes and falls.

I weaned off lithium slowly over 6 months. About two months after lithium was ceased all together, my physical health began to improve. I started to feel better in my body and mind. I had more energy, less pain and my blood tests were returning positive results.

Now, three years after ceasing lithium I have also been able to stop taking other medications that were added over the years to manage side effects. I have lost 11 kilos. My blood tests have shown that I am no longer pre-diabetic, my bad cholesterol has dropped from 9.4 to 5.4 and calculations made by my doctors after favourable test results have indicated that my risk of heart disease has shifted from being in the high risk range to now being at low risk.

My mind and memory are clearer, my neurological condition is being managed by the oils as is my sleep, anxiety and mood. My energy levels have increased, I am exercising every day and my relationships with the people I love and care about has improved. I have

been able to continue to work as an executive and an advocate, have started drawing and painting again. I have not fallen in over a year.

I do still have times when my mental health feels a bit precarious but these times are short lived and I can manage this so much more easily than the continuously heavy and grey feelings I had while being treated with psychiatric medications.

I am so very grateful to have had the opportunity to have my health reviewed by new general practitioners and a specialist physician. And I have all the support I need from peer workers, family, friends and my work colleagues.

As an advocate, I long for all people with mental health issues to have the opportunity that I have had through my great medical team including my physician, general practitioners and pharmacist who has sometimes been the link between my physician and my GPs, one of whom has specialised in medical cannabis treatment.

Having the support of my physician to take these very serious and considered steps of ceasing psychiatric medications that were harming me, and to use medically prescribed CBD oil has changed my life in the most positive ways.

Before these changes, my husband and I planned only for his older age; now we are making plans for our older age together and I am a contributing member of my family and community.

Isn't this what we all want?

PREVENTIVE HEALTH AND RISK FACTOR INTERVENTIONS

Preventive health care includes "the prevention of illness, the early detection of specific disease, and the promotion and maintenance of health" (The Royal Australian College of General Practitioners, 2018). It is an important activity in primary health care, especially general practice, because the partnership between GPs and their patients can help people reach their goals of improving health. Preventive health care is also crucial in addressing the health disparities experienced by vulnerable population groups (The Royal Australian College of General Practitioners, 2018).

Evidence-based preventive health care in general practice has been promoted and supported by the Royal Australian College of General Practitioners (RACGP) through the Red Book, *Guidelines for preventive activities in general practice*, and includes "the prevention of illness, the early detection of specific disease, and the promotion and maintenance of health" (The Royal Australian College of General Practitioners, 2018). These guidelines recognise that preventive care is also critical in addressing the health disparities faced by disadvantaged and vulnerable population groups. Preventive health care activities can be opportunistic or systematic (The Royal Australian College of General Practitioners, 2018). In Australia, most preventive activities are 'opportunistic',

which means that patients present to a primary care service for a reason that is not connected to the preventive health activity which is then an "add-on" activity.

Systematic approaches include registering and recalling patients for some specific targeted conditions such as screening for cancer or diabetes. The RACGP provides guidance on opportunistic and proactive preventive care for general practices covering preventive health activities both primary, i.e., preventing the initial occurrence of a disorder, and secondary, i.e., preventive early detection and intervention (The Royal Australian College of General Practitioners, 2018).

Despite overwhelming evidence about the importance of preventive interventions and their effectiveness, they remain "underused" in general practice in Australia (Calder et al., 2020).

This report summarises the preventive health care that is recognised as most significant for parity of health care and outcomes of people living with serious mental illness and proposes principles and supports for systematic implementation within primary care and through shared care protocols.

Queensland Health Collaborative: smoking cessation.

Queensland Health adult mental health services and Queensland Mental Health Clinical Collaborative have prioritised physical health care including the state-wide implementation of universal smoking cessation across adult acute inpatient and community mental health services.

Since 2015, mental health services have implemented local solutions for smoking cessation, participated in state-wide forums to share experiences, and review progress towards goals.

Improvements in recording of smoking status and delivery of an evidence-based brief intervention Smoking Cessation Clinical Pathway have been demonstrated across inpatient acute units recording: 38% Oct 2015-78% April 2021) and community mental health services (30% in 2017 to 82% in 2020).

Partnership with Queensland Quitline has enabled community mental health consumers to access an intensive quit support program providing 12 weeks of NRT and telephone support. Recent results indicate that over 40% of community mental health consumers complete this program with quit rates of 24% at 6 months and 20% at 12 months.

Qld Mental Health Clinical Collaborative
Real Time, Real Services – Statewide practice change

Reference. Plever S, McCarthy I, Anzolin M, et al. Queensland smoking care in adult acute mental health inpatient units: Supporting practice change. Aust NZ J Psych 2020; Vol: 54(9) 919–927DOI: 10.1177/0004867420917443

Smoking prevalence, risks and cessation support: RACGP Guidelines

During working group discussions the importance of smoking cessation was a consistent priority. There is increasing evidence for effective smoking cessation in people with serious mental illness (Gilbody et al., 2021). The Royal Australian College of General Practitioners Smoking Cessation Guideline January 2020 (The Royal Australian College of General Practitioners, 2019), provides relevant evidence and information and is reproduced in part here: (The Royal Australian College of General Practitioners, 2019)

Prevalence and risks

Population surveys indicate much higher smoking prevalence rates among those with mental disorders (meeting ICD-10 criteria), of approximately 33% of those with anxiety disorder, 43% of those with affective disorders and 54% of those with substance use disorders.

In 2016, Australian adults who reported having been diagnosed or treated for mental illness in the past year were more than twice as likely to smoke regularly as the rest of the population (24% versus 10%). For people with psychotic illness, the prevalence of current tobacco smoking rate is up to 66%.

Mental illness is associated with both higher rates of smoking and heavier smoking. People with mental illness (e.g. schizophrenia, depression, bipolar disorder, anxiety) often experience physical, financial and social disadvantages because of their illness.

There are links between smoking and mental health; smoking and mental health and physical illness; and smoking, mental health, debt and poverty.

Appropriate Interventions

Actively encouraging and assisting smoking reduction and cessation are important to improve the quality of life of all who smoke. Treating tobacco dependence is an important intervention for people with severe mental health illness but cessation rates are generally lower in this group for any given level of assistance. A mix of face-to-face help augmented by Quitline calls is as effective as intensive face-to-face help. Higher levels of dependence in people with mental illness may need more intensive treatment (e.g. higher doses of Nicotine Replacement Therapy (NRT), closer follow-up and monitoring).

Varenicline has been found to be safe and effective for smoking cessation in people with stable mental illness or a past history of mental illness.

Smoking cessation should not worsen the mental health illness of people with stable psychiatric conditions. Evidence indicates that smoking cessation is associated with reduced depression, anxiety and stress together with improved mood, compared with continuing to smoke (Ragg & Ahmed, 2008). This finding is consistent for those with and without a diagnosed psychiatric disorder.

Smoking and drug interactions in people with a mental illness

Nicotine does not interact with psychiatric medications. However, the tar in tobacco smoke induces certain liver enzyme activity (cytochrome P450 1A2 [CYP1A2]) which increases the metabolism of certain medications, including some psychotropic treatment. Those who smoke may therefore require larger doses of these medications.

In the event of smoking reduction or cessation, the medication may require dose reduction and increased monitoring.

Key Points

Intensive smoking cessation counselling and close follow-up are important in this patient population group.

Consultation with a psychiatrist or addiction specialist may be considered for advice on use of medicines for smoking cessation in people with significant mental health illness, including:

- advice on use of smoking cessation medicines
- need for adjustment of psychotropic medications
- monitoring of neuropsychiatric symptoms

Nicotine replacement therapy (NRT) is safe and effective for people with a mental health condition. Combination NRT is generally needed as people with mental illness have higher levels of nicotine dependence.

Both varenicline and bupropion can be used in people with significant mental illness. A large randomised trial showed no increase in neuropsychiatric adverse events attributable to varenicline or bupropion relative to a nicotine patch or placebo (The Royal Australian College of General Practitioners, 2019).

Diet nutrition and physical activity

The Consumers and Carers working group identified health care support with dietary management of health in people with SMI as a significant concern. In response, a Being Equally Well research group has undertaken a review of the literature to synthesise the available evidence on the use of dietary intervention in treatment of physical outcomes in people living with SMI. A full report with references is in Appendix E (Volume 2; p.33).

Studies have included both diet alone and broader lifestyle programs with several components such as exercise. Support for people with mental illness to engage in physical activity has been shown to improve mental and physical health and quality of life (Rosenbaum et al., 2014; Rosenbaum et al., 2015). Almost all studies that included an accredited nutritional professional (dietitian) in the design and delivery of interventions reported successful outcomes for decrease in weight and BMI, reduction in blood pressure and improvement in diet quality. Earlier research showed dietitian-led interventions have a greater impact in addressing cardiovascular risks in general population and in people with serious mental illness. This supports previous recommendations for incorporating specialised nutritional professionals in diet-based interventions to address the complexity of the lifestyle needs and socioeconomic challenges often experienced by people living with SMI.

Low completion rates among intervention participants are common to most studies. Low recruitment and completion rates in complex behavioural interventions is prevalent in the general population and has been associated with mental health issues, for instance, depression. Notably, retention rates in the STEPWISE Trial for obesity were as good as among the general population (Holt et al., 2018), indicating that intervention design may overcome barriers. For individuals with SMI, challenges of behavioural changes are exacerbated by the effect of medications and by the impact of socioeconomic circumstances. Therefore, extensive assistance is essential to promote motivation and completion of a program. This assistance needs to come from trained professionals with a specialised skill set to support individuals to understand the impact of diet

and nutrition and to provide long-term support and follow-up in real-life settings. For example, outcomes of one of the trials showed that, although the trial was unsuccessful in improving cardiometabolic outcomes of the intervention group, such as BMI or waist circumference, 12 months of intervention significantly increased the readiness to change dietary behavior (Holt et al., 2018). A meta-analysis of lifestyle interventions has shown lifestyle interventions have limited effect in promoting weight loss among people with SMI (Speyer et al., 2019). Continuous follow-up in general practice could ensure that diet is a consistent part of health checks and that timely referral to specialised care could be made for people who were ready to improve their diet.

Importantly, none of the reviewed trials reported any harm which could be directly associated with dietary or lifestyle interventions that were undertaken by the participants. On the contrary, outcomes of at least one study showed significantly fewer medical hospitalisations in its lifestyle intervention group, with 7% of intervention participants undergoing medical hospitalisation compared with 19% of controls over the 12-month intervention period (Holt et al., 2018).

The Mediterranean diet has been shown to protect against cardiovascular disease and diabetes. There is evidence that it can ameliorate depressed mood (Dinu et al., 2020; Jacka et al., 2017).

The Mediterranean diet is:
- High in vegetables, fruits, legumes, nuts, beans, cereals, grains, fish
- Unsaturated fats such as olive oil
- Low intake of meat and dairy foods

In practical terms, this review confirms that there are large advantages for the physical health of people with serious mental illness that come from a healthy diet and physical activity. The Mediterranean-style diet is the best known and is most beneficial for a range of health outcomes. It protects against CVD and diabetes and there is evidence that it can ameliorate depressed mood.

Keeping the Body in Mind – a service model

KBIM program supports participants to make healthy lifestyle changes such as become more active, improve sleep and stress levels, quit smoking and eat nourishing food (iphYs, 2018; NSW Health - South Eastern Sydney Local Health District, 2021).

KBIM is integrated within community mental health services and offers individualised consultations with a physical health team including a nurse, exercise physiologist, dietitian, tobacco treatment specialist and peer support worker. Cooking, sports and other groups are available as well as a free on-site gym that is serviced by student exercise physiologists.

Young people and adults living with severe mental illness are supported by the team to make lasting lifestyle behaviour change. Motivational interviewing,

health coaching and a recovery-based approach are incorporated within the program.

All individuals have access to the program for the duration of their care. However, the early psychosis program prioritises early intervention and to support young people to protect their physical health through an intensive 12 week program (Curtis et al, 2016 & Curtis et al, 2018).

KBIM continue to develop resources that support consumers, carers and clinicians to reduce the mortality gap.

Cardiovascular disease, diabetes and cancer

People with SMI are most likely to die from cardiovascular disease, diabetes and cancer; much of it preventable through pro-active health care by general practice.

Cardiovascular disease (CVD) contributes 40-50% of the 10-25 year mortality gap for people with a SMI. The prevalence of diabetes is 21% versus 4.9% and high cholesterol 31% versus 6.1% in the general population. Antihypertensive medication is being taken by 52%, 40% have diagnosed diabetes or hyperglycemia and 40% have high cholesterol. The proportion in the ACVR high risk category is 24% compared with 11.9% in the general population (Galletly et al., 2012).

Compared with the general population, people living with a serious mental health condition have a significantly increased risk of developing metabolic syndrome – a combination of obesity, high blood pressure, dyslipidaemia (blood lipid levels that are too high or low, contributory factors for CVD) and hyperglycaemia (an excess of glucose in the bloodstream, often associated with diabetes mellitus). This cluster of risk factors has been associated with the prevalence of CVD and premature mortality in people with serious mental health conditions. Dietary management of CVD in the general population is well supported by extensive research. As discussed above, for people living with SMI, dietary modifications

have been proposed as an attainable and safe approach to manage comorbid physical conditions, including the metabolic syndrome.

What needs to happen in General Practice?

The authors of one Australian study found that users of mental health services visit GPs substantially more often than non-users, with the exception of those with no fixed address who seldom see a GP at all (Mai et al., 2010).

To improve the physical health of people living with serious mental health conditions, general practices should periodically recall people known to or attending the practice for health checks and reminders to participate in the national screening programs for breast, bowel cancer and cervical screening. The purpose of reminder and recall services would be to reduce deaths from cardiovascular disease, diabetes, lung and other preventable cancers. An Australian study of decision support resources for use in primary care (Link-me project) has found these to be effective in facilitating care navigation for and by people with mental illness with improved care provision and outcomes (Fletcher et al., 2021).

Assessment for cardiovascular risk is an effective assessment for a range of preventable health conditions that share the same risk factors as CVD. The main tool for assessing cardiovascular risk is the absolute cardiovascular risk (aCVR) chart (Appendix F: Volume 2; p.40). For the last 25 years, aCVR has been used to predict the 5 year risk of a cardiovascular event based on gender, presence of diabetes or not, blood pressure, cholesterol, and smoking. Blood pressure, cholesterol and smoking are multiplicatively (accumulating) related risk factors for cardiovascular disease and account for about 70% of prevalence (Jousilahti et al., 2016; Milne et al., 2003). The Australian aCVR assessment tool is based on this body of evidence.

The National Health and Medical Research Council has endorsed the aCVR guidelines for clinical practice (Stroke Foundation, 2021). These guidelines were adopted by the Royal Australian College of General Practitioners in 2012. An updated aCVR guideline is to be published in late 2021. It is not known whether this will include mental illness indicators. Without them, the risk for people with mental illness can be underestimated by two thirds (Cunningham et al., 2019).

There is clear evidence that general practice is an effective platform for ACVR assessments (Dunbar et al., 2017).

Undertaking regular and routine health checks is not enough. Identified risk factors need to be reduced through support for improved health awareness and engagement of the individual and by appropriate treatments and support from general practice. Individuals can take action to reduce cholesterol levels by reducing fat intake, saturated fat intake and increasing fibre, and to reduce high blood pressure by reducing alcohol and salt intake. For others, medicines in current use are safe and effective. Use of the aCVR charts facilitates prescribing of statins to reduce cholesterol and antihypertensive medication in addition to lifestyle improvement. Costs of lifestyle modification and medication are an issue for people with serious mental illness. PBS costs for life saving drugs such as statins, anti-hypertensives and metformin, as well as antipsychotic drugs, need to be subsidised with no gap payments so as to maximise access to these medications for people with serious mental illness.

There is a precise mathematical relationship between cholesterol, smoking and blood pressure - intermediate outcome measures - and final outcome measures of deaths and cardiovascular events. If the changes in risk factors are measured, the effect on CVD deaths and events are predictable for that population (De Hert et al., 2009).

The Australian type 2 diabetes risk assessment tool (AUSDRISK) is a 10 question questionnaire which helps to assess the risk of a person developing type 2 diabetes over the next 5 years. Depending on the score, blood tests can identify whether the individual is in the normal range, prediabetes range requiring a diabetes prevention program or requires referral for diabetes treatment.

There is a precise mathematical relationship between measurement of HbA1c (blood test that is used to help diagnose and monitor people with diabetes) (healthdirect, 2020), diabetes outcomes and their costs for that population. Absolute levels for cholesterol, blood pressure, and HbA1c are required to measure predicted changes in CVD and diabetes events. With HbA1c the health economic consequences can also be predicted with the UK Prospective Diabetes Study methodology (UK PDS) (Alva et al., 2014).

Interventions can be offered that will improve the individual's health. These can be offered and supported by GPs, practice nurses, practice-based mental health nurses (nurse navigators) or referral to specialists and programs such as the *Life!* diabetes prevention program in Victoria (Dunbar et al., 2014).

Colocation, collaboration and communication in Camperdown, Victoria

Kate Schlicht, registered psychologist, is part of the south-western Victoria regional Primary Mental Health Team. She is based at the Camperdown Clinic, a GP practice. The PMHT aims to provide the best care in a collaborative way which includes sharing of notes with the GP. This arrangement is better for communication between the mental health team and the GPs. The team provide information, management plans, treatment for the patient and the GP. Together the team works with the patient planning, implementing and evaluating their care and treatment. The GP practice team supporting the service includes the practice manager, practice nurse and GPs. The colocation, collaboration and communication are vital components of this model.

Can these interventions contribute to parity of health outcomes for people with serious mental illness?

The UK National Institute for Health and Care Excellence (NICE) provides evidence-based recommendations and audits for the National Health Service in England and Wales. It has looked at the effect of the Quality and Outcomes Framework (QOF) on parity of outcomes among people with serious mental illness and diabetes. For further detail of these outcomes see Appendix G (Volume 2; p.42).

Dr Alan Cohen, GP and Inaugural Chair of the Clinical Group of **Equally Well** UK has been involved with the NICE audit of care processes for diabetes. He says:

"I think it would be fair to say that the QOF (or financial incentives) improved the parity in processes of care for people with SMI, for both CVD and Diabetes."

Among people with serious mental illness, quality of care is adversely associated with socio-economic, ethnic and gender factors. Register and recall systems systematically identify and address these inequalities.

Australian evidence demonstrates the capability of general practice to provide effective care and treatment of comorbid physical and mental health conditions. *TrueBlue* was the first trial of Collaborative Care in the southern hemisphere demonstrating that GPs and practice nurses could screen for and manage depression among people with cardiovascular disease and diabetes. The practice nurse became the care manager for stepped care involving mental health services (Morgan et al., 2013).

In the Link-me trial, a decision support tool was used for treatment allocation among people with depression and anxiety in primary care. The model resulted in more rapid improvement in psychological distress than usual care. This approach supports the wide-scale implementation of stepped care in which patients are allocated to a step appropriate for their needs (Fletcher et al., 2021).

Most relevant to reducing absolute cardiovascular risk in people with severe mental illness is the Assertive Cardiac Care Trial currently underway (Lewis et al., 2020). A CVD risk factor intervention has been co-produced with people living with severe mental illness. A conversation aid, healthy heart action plan, tailored SMS messages and a healthy heart resource have also been co-produced. This intervention applies Assertive Community Treatment and Motivational Interviewing principles and aims to deliver and implement a person-centred model of care that accounts for multifactorial risks and is inclusive of pharmacological and non-pharmacological treatments. When reported, the results may improve implementation of the CVD guidelines in General Practice.

Based on a decade of experience in Australian general practice and around the world, the Quality Improvement working group has recommended the use of Collaboratives to speed the uptake of evidence and to help practices work with each other to improve delivery of these preventive activities. Collaboratives would ensure rapid uptake of findings from the Assertive Cardiac Care Trial. Improved implementation through Collaboratives will enhance training for GPs in CVD risk prevention by increasing GPs' knowledge of physical interventions, training in serious mental illness to increase GP confidence to engage people with SMI and to reduce mental health stigma. Additional staff to support workload such as nurse navigators and sharing knowledge within the teams will be important.

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SYSTEMATIC SUPPORT FOR TEAMS AT THE FRONT LINES OF CARE TO DO BETTER

Key shifts at Microsystem level

Achieving the goals of improving physical health outcomes and establishing care partnerships with consumers and carers requires the following changes at microsystem level:

1. Primary care practices and specialist mental health services establish a model of shared mental and physical health care.

2. The new shared care arrangement must be underpinned with effective data sharing, including the optimization of systems for routinely collected clinical information and decision support making tools for clinicians.

3. The use of practice-based registers to enable proactive screening and monitoring of the physical health of people with serious mental illnesses through recall and alert processes.

4. The use of existing clinical guidelines for supporting the physical health of people with severe mental illness including the implementation of medication choice guidelines.

5. Workforce development through information, training and development of the capabilities of the workforce to understand the links between physical and mental health, together with investment in an additional workforce of practice-based community mental health nurses/nurse navigators to provide care management and navigation and support lifestyle coaching and signposting to community supports.

Improvement in health outcomes for individuals is intrinsically local: that is, within the mental health teams and general practices at the front lines. The working groups have proposed that these functions be undertaken through new responsibilities for existing agencies, new reporting mechanisms and new data systems. By providing reports to support data-driven improvements and the opportunity to learn and improve through Collaboratives and Communities of Practice, based on joint clinical guidelines and supporting standards, the system of care proposed is designed to improve outcomes and incrementally reduce the life expectancy gap. Progress towards parity could be significant if backed by a well-resourced effort (Berwick, 1996).

COMPONENTS OF THE *BEING EQUALLY WELL* SYSTEM

The *Roadmap* overview

The project vision of a sustainable, adequately resourced and quality assured system-wide endeavour towards Being Equally Well for people living with serious mental illness is presented in the following diagram.

This section discusses the key tools and enablers for the front line that are considered essential by the project expert working groups. They key tools and enablers are shown in grey in the diagram.

Clinical Guidelines

National clinical shared care guidelines and protocols for the physical health care of people with serious mental illness should be developed.

Clinical guidelines are systematically developed statements to assist clinicians and consumers make decisions about appropriate health care for specific clinical circumstances. Protocols provide information and support for local implementation of guidelines.

A shared care protocol for prescribing of antipsychotic and other drugs is proposed, to enable the person with serious mental illness, their GP and psychiatrist to better monitor any side effects of antipsychotic and other medication. Implementation of shared care guidelines requires funding support through the Medicare Benefits Schedule for shared care including asynchronous case conferences. Appendices B, G and H (refer Technical Report Volume 2) provide detailed information on the principles of managing antipsychotic medication.

Funding has been provided by the NSW Mental Health Commission and given to the Mindgardens Neuroscience Network for a project: Keeping the Body in Mind: Physical Health Clinician Resource package. This will update the NSW HETI Positive Cardiometabolic Health algorithm (Curtis, 2014) and should be available by early 2022.

The original NSW algorithm was adapted in the UK to bring together what general practitioners and psychiatrists should do (Shiers et al., 2014) (Appendix H: Volume 2; p.46). The UK approach brought together all relevant professional colleges such as the Royal Colleges of General Practice, Psychiatrists and

Being Equally Well: roadmap overview

Shared clinical guidance and protocols	Practice-based registers, national and regional registries	Quality Collaboratives and pro-active use of data	Tailored practice payments for quality care	Evidence and research for effectiveness	Nurse navigator roles and workforce capability

Integrated physical and mental health decisions/choices	A consistent approach to achieving informed consent	Model of shared care	Integrated data driving service and quality improvement	System governance and leadership at all levels

Improved physical health outcomes for people with serious mental illness	Care partnerships with consumers and carers

Key: ☐ key tools for the front line, ☐ centerpiece of the roadmap, ☐ core components, ☐ the fundermental goals
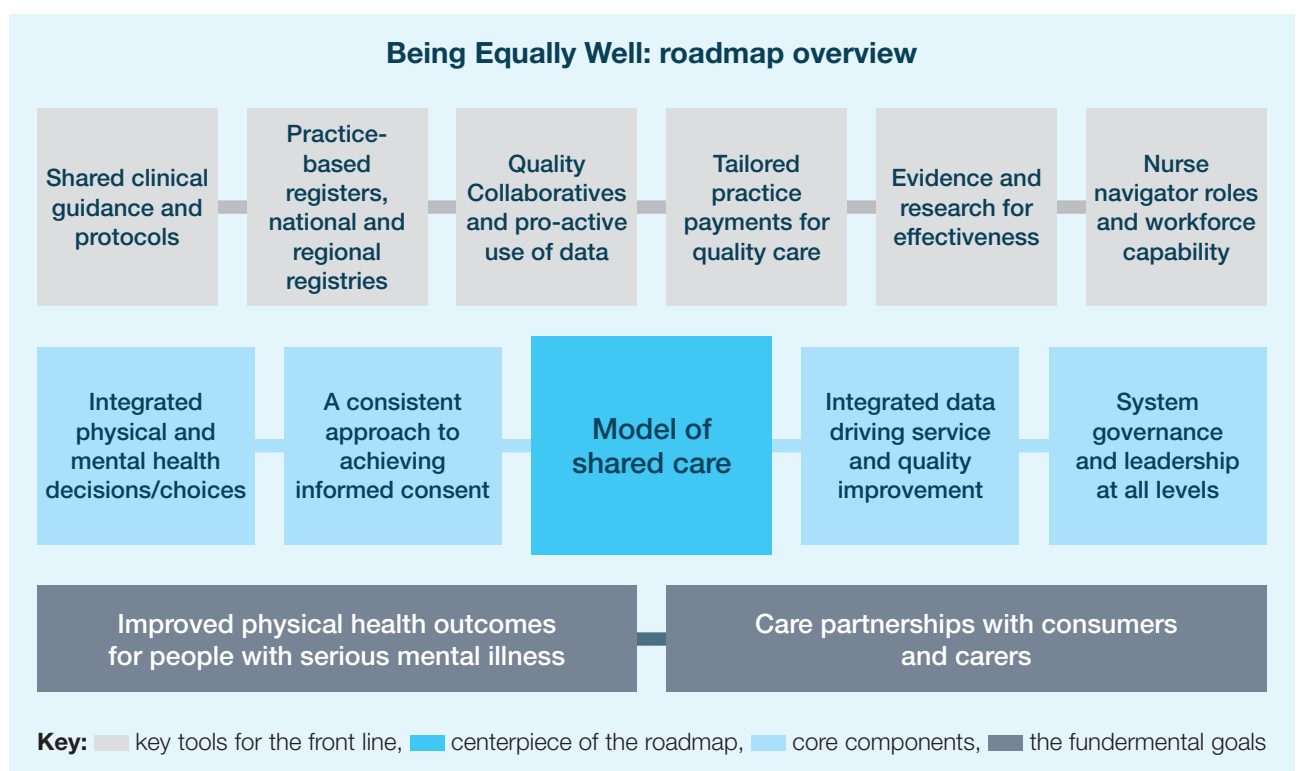
Figure 6. Being Equally Well: Roadmap overview

Nursing with relevant non-government organisations such as Rethink and Diabetes UK. The outcome has been a multi-disciplinary resource providing a common framework for primary and secondary care. https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/national-clinical-audits/ncap-library/ncap-e-version-nice-endorsed-lester-uk-adaptation.pdf?sfvrsn=39bab4_2. The National Institute for Health Care Excellence UK (NICE) has developed clinical guidelines and quality standards based on the algorithm for the treatment of schizophrenia and psychosis with a strong focus on improving physical health outcomes and particularly cardiometabolic risks and impacts (NICE CG178, NICE CG155) (NICE QS80). Subsequently there has been a sustained investment in secondary care incentives to improve physical health management based on the algorithm (David Sheirs, 2021). The NSW developed algorithm has been central to an ongoing set of national clinical audits in the UK of mental health services that are currently focused on early intervention in psychosis services (Royal College of Psychiatrists, 2021).

The establishment of national clinical guidelines for shared care should be endorsed by the Australian Health Council and resourced by government. Shared Care Clinical Guidelines should be developed and disseminated jointly by the Royal Australian College of General Practitioners and the Royal Australian & New Zealand College of Psychiatrists with parity of consumer and carer participation and in collaboration with the development of the NSW Physical Health Clinician Resource package. Once established, the guidelines should be regularly updated through review of relevant evidence, consistent with the Living Guidelines model, such as those in development by the Stroke Foundation for stroke management in Australia (Stroke Foundation, 2021). The Stroke Foundation project is a partnership between the Foundation and Cochrane Australia and is supported by the Medical Research Future Fund.

National Mental Health Clinical Quality Registry and General Practice Registers

A National Mental Health Clinical Quality Registry is considered an essential component of support for better physical health care for people living with serious mental illness.

This registry is to measure national progress towards parity in life expectancy for people with serious mental illness through the reporting of clinical outcomes data to health care providers to inform and guide quality improvement in health care.

General Practice registers would provide a register and recall system for people with serious mental illness and would contribute anonymised data to PHNs. MBS funding would be required to support GP registers and reporting.

Clinical Quality Registries (CQR) have a long history of improving the quality of care and reducing the costs. For instance, the Australia and New Zealand Dialysis and Transplantation Registry (ANZDATA) between 2004 and 2014 achieved the following improvements:

- 15% in the dialysis mortality rate (1156 fewer deaths)
- 39% in transplant graft loss rate (606 fewer transplant grafts lost)
- 40% in peritonitis rates (2573 fewer infections)

The return on investment was $7 for every dollar spent.

The National Clinical Quality Registry and Virtual Registry Strategy 2020-2030 sets out a vision that *"National clinical quality outcomes data are integrated into Australia's health care information systems and systematically drive patient-centred improvements in the quality and value of health care to achieve better patient outcomes across the national health care system (Commonwealth of Australia, 2020)."*

The Strategy provides for actions to improve the collection, monitoring, reporting and actioning of national clinical quality outcomes data in line with best practice principles established by the Australian Commission for Safety and Quality in Healthcare (ASQHC). The aim for the Strategy is that it will guide strategic investment in clinical quality outcomes datasets in areas of national priority and by integration with Australia's major health care datasets (Commonwealth of Australia, 2020).

The national importance of systematic clinical quality outcomes reporting on the physical health care of people with serious mental illness is clear in this project report, as well as in the work of a range of national bodies in recent years. Establishment of a National Mental Health Clinical Quality Registry is recommended as an essential system-wide leadership, quality assurance and quality building mechanism to achieve the goal of reducing the life span gap and high rates of poor physical health for people with serious mental illness.

Establishment of the National Mental Health Clinical Quality Registry (NMHCQR) should be given national support through the Australian Health Council. The Australian Health Council should establish an annual reporting requirement on the physical health and premature mortality of people with serious mental illness and resource the NMHCQR to do so.
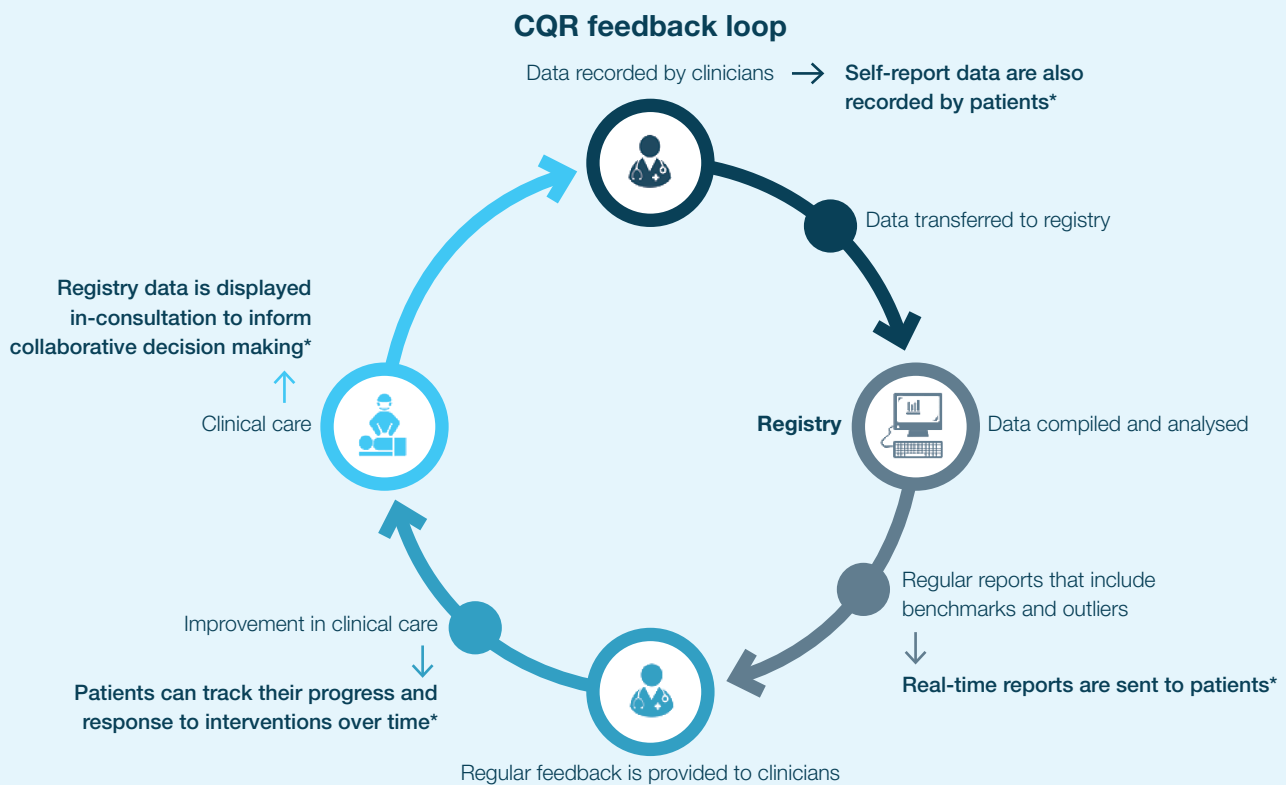
Establishing the NMHCQR will require consideration of the appropriate governance and location of the Registry. Given the leadership role of the Australian Commission on Safety and Quality in Health Care in clinical registries, the Commission would be the most appropriate body for the establishment and operation of the NMHCQR.

Further, establishing the NMHCQR as the central and essential mechanism to drive the achievement of parity of health care and health outcomes for this significant population group will require government commitment to adequate and ongoing funding of the Registry and its operations.

Design principles for the NMHCQR should include:

1. An expert working group of clinicians and consumers should be established to design the NMHCQR

2. Data definitions and inclusions, noting that two Clozapine manufacturers' registers in respect of treatment for schizophrenia are established

3. Linked from:
   - ABS deaths register;
   - AIHW ICD10 codes for cardiovascular events, diabetes, and the cancers of the national screening program; breast, cervix and colon, prostate and lung cancer
   - Pharmaceutical Benefits Scheme (PBS) for prescriptions
   - Medicare (MBS) for health service use
   - Australian Health Practitioner Regulation Agency (AHPRA) for workforce data
   - GP registers through PHN data collections

4. Confidentiality

5. Actioning improvements in quality. The NMHCQR is to:
   a. lead and drive the integration of clinical quality outcomes information into all aspects of health care for people living with serious mental illness; and
   b. monitor and report on person-centred changes in health status and life span for this health care group

An outline of the full CQR process in the draft National CQR Strategy Consultation document of May 2019 illustrates the feedback loop that is required (diagram of the CQR feedback loop below) (Commonwealth of Australia, 2019).

CQR feedback loop

Data recorded by clinicians → **Self-report data are also recorded by patients***

Data transferred to registry

Registry data is displayed in-consultation to inform collaborative decision making*

Clinical care

Registry Data compiled and analysed

Regular reports that include benchmarks and outliers
↓
Real-time reports are sent to patients*

Improvement in clinical care
↓
Patients can track their progress and response to interventions over time*

Regular feedback is provided to clinicians

* Future steps, taken from international examples

Figure 7. The CQR feedback loop

Inserted from "Maximising the Potential of Australian Clinical Quality Registries Using Data to Drive Improvements in Patient Care and Outcomes: A National Strategy 2019-2029" by Commonwealth of Australia, 2019. Retrieved from: https://www1.health.gov.au/internet/main/publishing.nsf/Content/F092FB9BBFDA4CBACA2583CB000505FE/$File/Draft%20National%20CQR%20Strategy%20May%202019%20-%20Consultation.pdf. Reprinted with permission.

Quality improvement should also be driven by State level review groups of consumers, carers and clinicians: psychiatrists, GPs, community mental health nurses (nurse navigators) examining the relevant NMHCQR data.

Information at Primary Health Network (PHN) level would be drawn from GP registers and made available to the NMHCQR, and state or territory review groups so that progress with intermediate outcome measures that determine cardiovascular events and cancers is known. The data from PHNs would give an overall measure of how well the system is performing. Reductions in risk factors like cholesterol, blood pressure and smoking should, within a few years, begin to show as reductions in hospital admissions and mortality, provided that costs barriers to use of metformin, statins and anti-hypertensive medication are also removed.

A national feedback loop is required to provide information from the NMHCQR to PHNs and General Practices in benchmarked, anonymised reports showing performance in improving the risk factors.

The purpose of these reports would be for practices to learn and improve. PHNs would need to be resourced to ensure capability to work with high performing practices and to set up Communities of Practice in which GPs as a peer group could learn from each other and with mental health teams. This activity would parallel the Collaboratives and would be expected, within a few years, to produce measurable improvements in life expectancy.

A NSW program has been developed on these principles as a collaboration between the state health department, PHNs and participating general practices, to improve health outcomes and experiences for individuals. The Lumos program, established by NSW Health with funding from the Commonwealth Government Health Innovation Fund, links deidentified data from general practices with other health service data to overcome the fragmentation of information about care, particularly for people requiring more intensive management of complex health needs, and to provide 'whole of system' information on patient pathways to general practitioners. The data set spans regional, remote and metropolitan areas of the State. The program was established in 2020 as a statewide

strategy and is now the largest collaboration that NSW health has undertaken with the state's PHNs with more than 450 participating general practices to date. Data is collected and linked twice a year and includes at least: emergency department, public and private hospital admitted patients, non-admitted patients (NAP), ambulance, cancer, and cause of death data. Participating general practices and PHNs then receive a customised report to inform improvements in care (NSW Government, 2021).

After each linkage, participating general practices and PHNs receive a customised report about patients who visit their practice that they can use to improve care. One participating General Practitioner highlights the benefits of Lumos, stating "any meaningful trackable data helps us improve our care" (NSW Government, 2021).

The state and territory outcome review groups should also have access to the measures from PHNs and from the Collaboratives to see the rate of improved performance in mental health services and general practice and to support Collaboratives in addressing topics of statewide significance as well as locally specific topics, based on analysis of outcomes.

Use of sentinel events is an established technique for improving outcomes. Sentinel events are described as a "subset of adverse patient safety events that are wholly preventable and result in serious harm to, or death of, a patient" (Australian Commission on Safety and Quality in Health Care, 2019). Premature death (below the age of 60) of someone on the NMHCQR could be regarded as a sentinel event. This would then require the relevant outcome review group to look at the causes of death and what could be ascertained to improve performance in the health system. For instance it might be demonstrated that no assessment of cardiovascular risk had been done or no referral to a smoking cessation program. Although confidentiality does not apply after death, to achieve significant improvement in premature mortality may require a trade-off between learning lessons from sentinel events and confidentiality which needs to be taken into account when deciding on how data are linked.

Standards for the physical health care of people with serious mental illness should be developed. These should be based on the evidence underpinning the proposed shared care guidelines. The standards should be applicable to all health services caring for people with mental illness. They could be used to inform primary care practices, community health services and tertiary care services about quality preventive health interventions for people with serious mental illness. Indicators that enable measurement

of care consistent with the standards should be incorporated into the data capture and reporting systems recommended in this report.

The NMHCQR data would also enable variance in clinical outcomes including geographical variations to be monitored and addressed. High performing providers would be evident and could be engaged to support improved performance within their local clinical community, a principal technique in Collaboratives and PHN-led Communities of Practice. Variance can also show maldistribution of the workforce and its impact for instance on rural and remote Australia (Australian Institute of Health Welfare, 2021).

Establishment of the NMHCQR, as the central and essential measure to drive the achievement of parity of health care and health outcomes for this significant population group will require government commitment to adequate and ongoing funding of the Registry and its operations.

Collaboratives for quality of care

Quality improvement Collaboratives for mental health services and primary care should be established as a national network to lead, inform and support quality health care improvements through primary healthcare and mental health services.

A quality improvement Collaborative is an organised, multifaceted approach that includes teams from multiple healthcare sites coming together to learn, apply and share improvement methods, ideas and data on service performance for a given healthcare topic (Wells et al., 2018). It is the fastest way to get evidence into practice.

Collaboratives are established to:

- invest in data and audit tool infrastructure;
- facilitate systems implementation within primary care practices (Hespe et al., 2018);
- foster quality improvement (QI) culture through development of local peer networks;
- develop and support activity cycles (waves) to create learning between participating health services and address quality improvement priorities and support implementation of protocols by early adopters;
- to identify and mentor local leaders; and
- develop and advocate for relevant supports and resourcing to facilitate and incentivise these activities.

Since 1995, the Institute for Healthcare Improvement in Boston has sponsored over 50 such collaborative projects on several dozen topics involving over 2000 teams from 1000 health care organisations. Teams in such Collaboratives have achieved dramatic results, including reduced waiting times by 50%, reducing intensive care unit costs by 25%, and reducing hospitalisations for patients with congestive cardiac failure by 50%.

In 2004, the Australian Primary Care Collaboratives were launched. Over its 10 years of operation, Australian Primary Care Collaboratives addressed diabetes, coronary heart disease, access, chronic obstructive pulmonary disease, patient self-management, Aboriginal health and diabetes prevention. It accelerated the rollout of absolute cardiovascular risk assessment. Between 2005-2011, 1185 health services participated in 13 waves. Eighty-three per cent of Australian divisions of general practice participated and 262 support staff received quality improvement training. Key measures showed improvement in all topics except access (Knight et al., 2012).

A detailed account of how Collaboratives work is given in Appendix D (Volume 2; p.23). Briefly, for SMI, an Expert Reference Group would choose the topic, write the Handbook which would specify the aims, measures and ideas for improvement.

This project recommends that Collaboratives for Being Equally Well health care would give priority attention to general practice measures in the package of care described below.

Priority issues for local Mental Health Services include best patient-centred use of antipsychotic medication and/or smoking cessation. Queensland Mental Health Clinical Collaborative has already run a successful smoking cessation program (Plever et al., 2020). See box on page 59.

Collaboratives could provide the meeting grounds and workshop opportunities for mental health and general practice teams to work together on better care, such as shared care protocols, identification of lead clinical care responsibilities and optimizing the role of practice-based nurse navigators.

Support for a national network of Quality Improvement Collaboratives for Being Equally Well would be essential to ensure system-wide consistency and sustainability. A national Quality Improvement Collaboratives for Being Equally Well Network organisation should be established and is strongly recommended. The National Network entity should be established contemporaneously with the NMHCQR and both should be administered and supported by a dedicated entity or Office for Quality in Physical and Mental Healthcare Outcomes in an appropriate national body or arrangement such as the Australian Commission on Safety and Quality in Health Care.

The Office for Quality in Physical and Mental Healthcare Outcomes would be the entity charged with providing the Australian Health Council with annual reports on progress to reduce the divide in premature mortality and physical health for people with serious mental illness.

Collaboratives at local area levels would report to the Collaboratives National Network entity on progress measures and strategies. The Collaboratives Network entity would give feedback to practices on the changes in measures over time among all practices and for that individual practice.
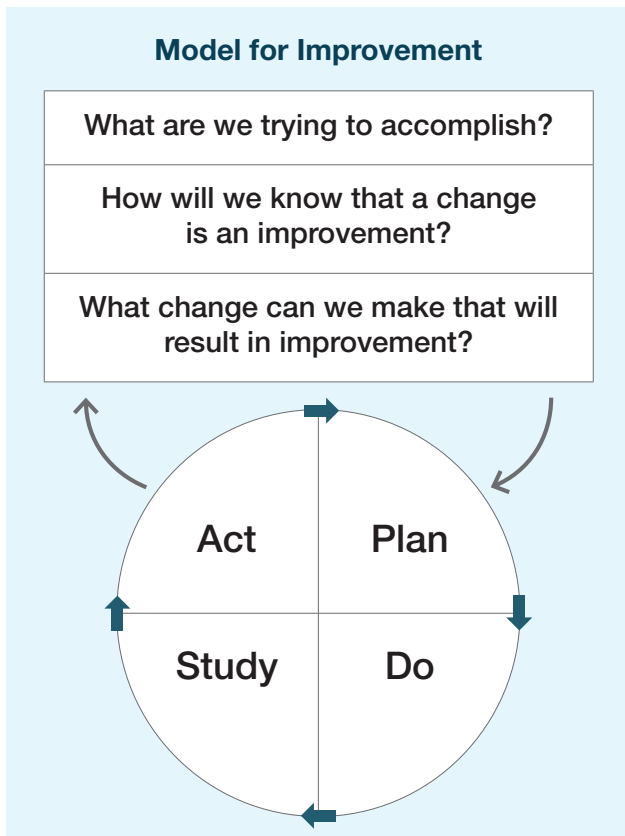

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act | Plan

Study | Do

Figure 8. Plan-Do-Study-Act cycle

Supporting success – funding quality of care

The BEW working groups have recommended the use of the current Practice Incentives Program (PIP) QI data returned by general practice to PHNs as the measures of success. The advantage is that it uses the existing system where aggregated, anonymised data are returned to the PHN. The disadvantages are that a) there is no subsequent quality improvement activity, and, b) the PIP QI measures are inadequate for determining at the population level the improvement in risk factors for the main causes of death in people with SMI. Therefore an MBS payment for a new SMI Health Check, Item 705 is proposed. It will link remuneration with care tailored to improve the risk factors contributing to poor physical health.

The necessary tool for recall and measurement of clinical outcomes is the general practice register of people with SMI.

The following measures are proposed all of which would be necessary to obtain payment. Exception reporting would be permitted if a decision by a consumer to opt out was recorded in the notes.

- Number of people with SMI on the register
- Number of ACVR assessments completed
- Number of diabetes risk scores completed
- Absolute measures of cholesterol, blood pressure, HbA1c and smoking rates needed to calculate predicted changes in CVD and diabetes consequences

- Number on the register prescribed statins
- Number on the register prescribed antihypertensive medication
- Number on the register prescribed metformin
- Number on the register with smoking recorded and number of non-smokers
- Number with BMI recorded and number with normal BMI
- Number on antipsychotic medication

A 'bundled payment' should be established to include a subsequent health check or checks to cover the shared care of people initiated on antipsychotic medication. Exception reporting would provide for a consumer's choice to opt out or the referring psychiatrist failed to review and there was a record in the notes.

A third recommendation is for establishment of an MBS Item Number for asynchronous case conferencing.

For reward of quality of care to work, in addition to a basis of evidence based measures, the following factors contribute to success:

- a voluntary system for GPs and consumers (with exception reporting for GPs for patients to opt out)
- sufficient payment to ensure that every GP participates and delivers the outcomes
- data collection through IT that is automatic and effortless for the practices

Table 3. Recommended potential health checks for people commenced on antipsychotic medication

	Baseline	12 weeks	Annually
History/Family History	X		X
Lifestyle risk factors: diet, physical activity, smoking, alcohol and other drugs	X	X	X
Weight	X	X	X
HbA1c or fasting glucose	X	X	X
Lipids	X	X	X
Blood Pressure	X	X	X
Prolactin	X	X	X
ECG	X	X	X
Use of statins and antihypertensives where absolute cardiovascular risk is high (after adjusting for additional SMI risks).		X	X
Metformin use where metabolic risks and weight gain cannot be controlled by lifestyle interventions and adjustment of antipsychotics		X	X
Shared care protocol reviewed by psychiatrist		X	X

The health checks proposed in Table 3 are for consideration in the development of the joint shared care guidelines.

Measuring Success: annual public reporting of the outcomes

Annual reporting to the Australian Health Council together with publication of an annual forward plan for improved physical outcomes and quality improvement is recommended as an essential central implementation component to achieve the *Being Equally Well* outcomes.

Data for the annual report would be compiled from the National Clinical Quality Registry and from PHN-aggregated GP data and primary care registers data.

PHNs and LHN/Ds would provide all practitioners and service providers with support through sharing change ideas that have been shown to improve care and support local practices in adapting those changes to suit their own contexts and communities. Monthly agreed measures would then be shared so that this will guide local improvement in service delivery and achieve improvement in preventable poor health.

The aim of a structured, national reporting mechanism is to achieve consistent focus at all levels of health care and health system governance on improvements in health outcomes and reduction in preventable mortality. Annual reporting will inform and guide health ministers and health service administrators in addressing this preventable health challenge. This will also enable focus on parity of health care and outcomes for people in communities affected by socio-economic disadvantage and those in rural and indigenous communities. Monthly aggregated communities of practice data will close the gap between potential and actual performance by testing and implementing changes at practice level quickly, with the support of PHNs.

The work of these local groups and of Collaboratives would be resourced and guided by the Collaboratives national network entity.

Publishing the results of the annual reporting cycle will inform public and policy attention and support a cyclical process of improvement.

Research and evaluation

Whilst further research is often considered a predictable outcome of a research and evidence based project process, it is clearly evident that achieving parity in opportunity for better physical health and longer lives for people living with serious mental illness needs and must have the best evidence to support health care improvements and system enhancements. It is recommended that this progress to parity should be considered as a priority area for research funded by the Medical Research Future Fund.

Project expert working groups identified the following issues and questions for research and evaluation as gaps in the current evidence:

- Evidence of the most effective and cost effective prevention of anti-psychotic induced weight gain and metabolic syndrome in people with serious mental illness, including the use of Metformin.

- Evidence for metabolically safer psychiatric medications and mechanisms to reduce metabolic side effects.

- Optimal effectiveness of peer workers in supporting people with a serious mental illness to improve their physical health.

- The impact over time of the clinical registries, Collaboratives and the annual morbidity and mortality reporting.

- What interventions, and strategies such as social prescribing, work effectively and cost effectively to improve diet and physical activity in people with serious mental illness?

- What are the effective mechanisms to enhance co-operation and integration across state, federal and private systems, including the NGO sector?

- What is the cost-effectiveness of mechanisms to improve service integration?

Workforce development

Working groups agreed that developing the capabilities of the health workforce to understand, build and sustain the links between physical and mental health is a central component of a successful system of health care for people with serious mental illness. Specific workforce roles to navigate the shared care service system for and with consumers are recommended. Professional education and training resources should be developed in alignment with shared care guidelines.

The role of practice-based 'Nurse Navigators' would provide clinical care coordination for consumers through a complex and fragmented health system across different levels of healthcare. The Nurse Navigator system already successfully implemented in the Gold Coast Integrated Care Program can serve as a blueprint for wider implementation across the country (McMurray et al., 2018; Spooner et al., 2019). Nurse navigators could be drawn from across the nursing workforce with appropriate additional professional education and/or training.

Consumers are adamant that the inclusion of peer workers in primary care will provide them with the support that makes a difference to their connections with health services and professionals and with their physical health and wellbeing outcomes. Investment in peer support workers within or available to general practice is consistent with emerging policy and practice in mental healthcare (State of Victoria, February 2021) and is considered a central requirement by consumers and carers. Whilst there is limited evidence currently on the outcomes of peer support for physical health improvements for people with mental illness, existing research into peer worker support in health care and lived experience led research should be considered. It is also evident that most studies into supported interventions with aspects of physical health have had limited efficacy and that intervention design may be an influencing factor. Consumer perception of benefit, the growing body of peer work literature across the health care spectrum and the professional and peer view that this a central aspect needing effort should be acknowledged. Investment in further research into optimal peer worker roles is supported by project working groups.

Workforce roles need to be developed that are specifically relevant to the lack of a psychiatric workforce in rural, regional and remote Australia and the resulting limitations in rural, regional and remote

general practice. The potential enhancement of primary care services in these communities should include community mental health nurses in or supporting general practice, nurse navigators in or supporting general practice, general physicians and peer workers.

The allied health workforce already provides health care services to support people with serious mental illness, but those services are limited in availability and access and are not utilized to the full extent of their capability. Coordination between primary care and other health providers needs to include pharmacists, allied health professionals and non-government organisations. Pharmacists could support improved medicines adherence and cardiometabolic risk monitoring in appropriate circumstances. The RACGP, the RANZCP, the Society of Hospital Pharmacists of Australia and the Pharmaceutical Society of Australia should work together to lead the development of a joint position statement defining such a role for people with SMI and how it should be implemented in practice. MedsChecks, Diabetes MedsChecks and Home Medicine Review programs could provide funding support for this component of shared care.

Physiotherapists, exercise physiologists, social workers, psychologists, and dieticians have significant contributions to make to supporting physical and mental health. The allied health workforce is located in all parts of the microsystem, but is largely in the private sector and access is limited or not possible for people with limited financial resources. Access to most allied health services incurs out-of-pocket costs, except for some limited access through a GP Management Plan.

Social prescribing should be considered as a means to assist consumer access to local non-clinical and non-government organisation support services. Social prescribing has been supported by the RACGP and Consumers Health (The Royal Australian College of General Practitioners and Consumers Health Forum of Australia, 2020) as a means to provide adequate and appropriate access to local non-clinical services for people affected by socioeconomic disadvantage and particularly for people experiencing mental health issues and those with chronic physical health conditions and multimorbidity. In a joint report, the benefits of social prescribing are described as wide-ranging and include health, economic, social and productivity gains, with the ultimate benefit being improved health and wellbeing for individuals and communities. The role of a 'link worker' to support individuals with access to local supports is central to social prescribing.

The organisations recommended:

- incorporation of social prescribing into the Australian Government's primary healthcare and preventive health strategies, including recognition of the need for funding and implementation support to ensure a more responsive and comprehensive patient-focused health system.

- investment in the workforce to undertake the 'link worker' role, recognising the areas where these skills already exist and building on this expertise to develop training and qualifications as needed.

The role of link workers in facilitating access to community services and supports, with social prescribing funding to support equitable access, has also been identified as valuable. Provision of a social prescribing support program with funding for link worker roles could be considered. There are parallels between the link worker and the peer support role which could be considered.

National advocacy and reduction in stigma and discrimination

Achieving the *Being Equally Well* outcomes requires a serious and sustained attempt to tackle stigma.

Discriminatory and stigmatising attitudes amongst health care staff in a range of settings may inhibit help-seeking by people with mental illnesses and associated physical health needs (De Hert et al., 2011). Inequalities in access to and outcomes of health care are evident in relation to general medicine and cardiovascular care but may also be present in

cancer and diabetes care (Mitchell et al, 2012). The Royal Australian College of Emergency Medicine (ACEM) has published the findings of recent research demonstrating that, whilst mental health presentations account for only around 4% of presentations in hospital emergency departments, this cohort disproportionately experiences delayed or blocked access to necessary treatment compared with patients presenting with other emergency conditions (Australian College of Emergency Medicine, 2018).

A national advocacy campaign is recommended as a necessary step to increase awareness of the poor physical health of people with a mental illness and will challenge stigma. The campaign should target different population groups, including: the general population, people with a serious mental illness and health professionals. Co-development is essential, seeking input from all key stakeholders including consumers, carers and health professionals to develop the content of the campaign with a focus on a broad approach to maximise reach. The content should be tailored appropriately for each audience, for instance, encouraging access to physical health care for people with SMI, promoting equal value of mental and physical health care for health professionals, and reduction of stigma for the public. The overarching message should be one of 'parity of esteem': equal value of mental and physical health.

Funding for development and implementation of a national advocacy campaign, for a sustained period of time, to promote awareness of the poor physical health for people with a serious mental illness and address stigma is recommended.

Mudgee: successful local practice based care.

Among people with severe mental disorders, physical health problems are greater in rural communities where access to specialist mental health services is limited.

There is a longstanding shortage of resident psychiatrists. Services designed for major cities do not work in these settings.

https://onlinelibrary.wiley.com/doi/full/10.1111/ajr.12560

The state funded Community Mental Health Team and the Mudgee general practitioners recognised this problem in 2007 and have worked together over the last 14 years. They care for clients with complex mental and physical health problems in the local community.

Advantages include:

- Clients receive mental and physical health care near to home. No more long travelling.

- Care is comprehensive and continuing; both for mental and physical health

- The close communication between mental health team, GPs and visiting specialists means that Mudgee based services do not feel unsupported or that patient care poses unacceptable risks for local clinicians.

This model of care has been evaluated and the most recent paper can be found at 10.5334/ijic.3943

BEING EQUALLY WELL NATIONAL SYSTEM INFRASTRUCTURE

This report makes the case for giving high priority to achieving better outcomes for physical conditions among people with serious mental illness. The project's recommended actions and initiatives to achieve significant improvements in physical health care and outcomes and life expectancy for people with serious mental illness require nationally consistent implementation with national monitoring and reporting on progress and outcomes.

To achieve national priority and implementation this project recommends that an annual report on outcomes and system performance be required by the Australian Health Council (the Council of health ministers of Australia) through the Health Chief Executives Forum.

The project strongly recommends the establishment of:

1. A National Mental Health Clinical Quality Registry

2. Quality Improvement Collaboratives to support shared care developments and quality improvement in a nationally consistent and locally appropriate strategy

3. A national entity or Office for Quality in Physical and Mental Healthcare Outcomes to administer the National Mental Health Clinical Quality Register (NHMCQR) and establish and support Quality Improvement Collaboratives for mental health services and primary care

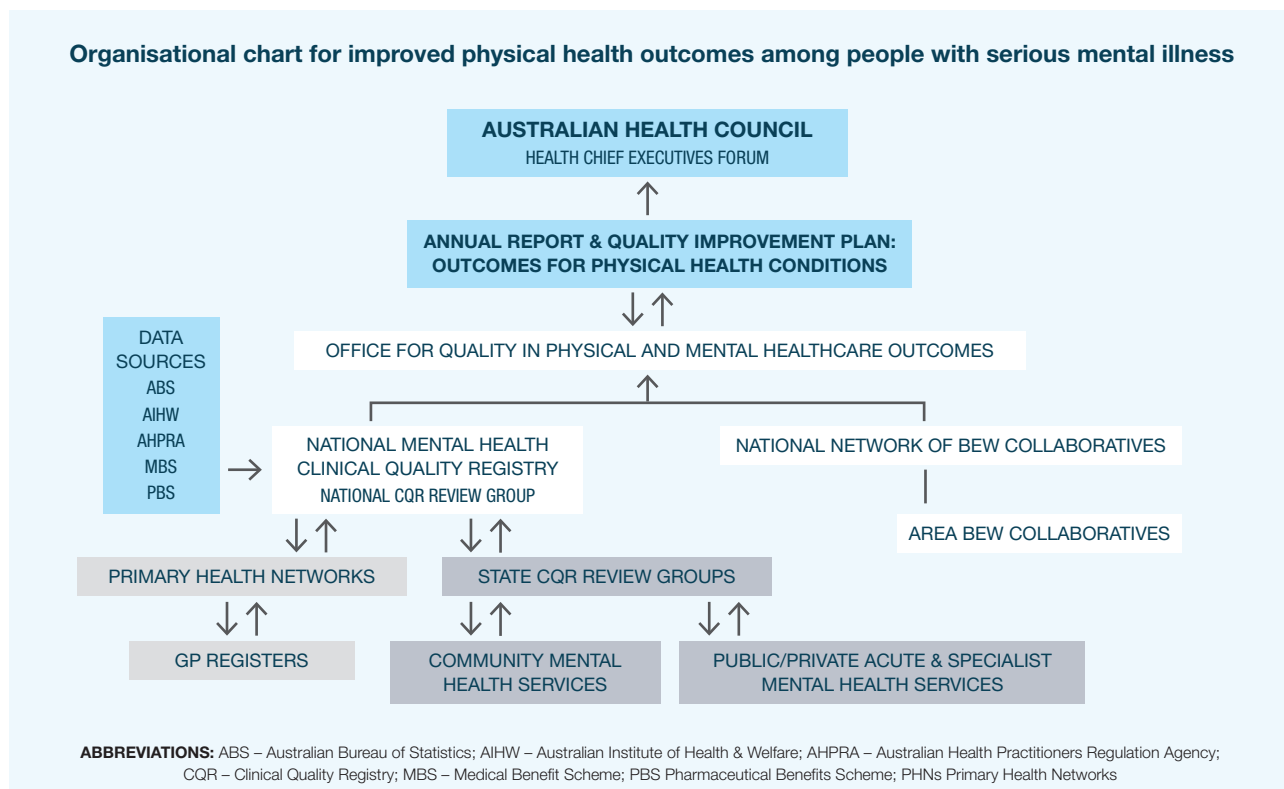The following diagram sets out the recommended infrastructure arrangements.

Organisational chart for improved physical health outcomes among people with serious mental illness

AUSTRALIAN HEALTH COUNCIL
HEALTH CHIEF EXECUTIVES FORUM

↑

ANNUAL REPORT & QUALITY IMPROVEMENT PLAN: OUTCOMES FOR PHYSICAL HEALTH CONDITIONS

↓↑

OFFICE FOR QUALITY IN PHYSICAL AND MENTAL HEALTHCARE OUTCOMES

↑

DATA SOURCES
ABS
AIHW
AHPRA
MBS
PBS
→

NATIONAL MENTAL HEALTH CLINICAL QUALITY REGISTRY
NATIONAL CQR REVIEW GROUP

NATIONAL NETWORK OF BEW COLLABORATIVES

AREA BEW COLLABORATIVES

↓↑   ↓↑

PRIMARY HEALTH NETWORKS   STATE CQR REVIEW GROUPS

↓↑   ↓↑   ↓↑

GP REGISTERS   COMMUNITY MENTAL HEALTH SERVICES   PUBLIC/PRIVATE ACUTE & SPECIALIST MENTAL HEALTH SERVICES

ABBREVIATIONS: ABS – Australian Bureau of Statistics; AIHW – Australian Institute of Health & Welfare; AHPRA – Australian Health Practitioners Regulation Agency; CQR – Clinical Quality Registry; MBS – Medical Benefit Scheme; PBS Pharmaceutical Benefits Scheme; PHNs Primary Health Networks

Figure 9. System supports to improve physical health outcomes for people living with serious mental illness

Implementation actions

This report represents the work of more than 60 individual professional and lived experience experts over a period of almost 12 months. It draws from their professional and personal experience, concerns and frustrations and has been designed to provide practical, feasible, affordable, evidence-based and person-centred strategies for easy and ready implementation by those with the power to do so.

The implementation actions proposed are:

1. **Development of national clinical guidelines for shared care should be:**

   a. Endorsed by the Australian Health Council and resourced by government

   b. Developed and disseminated jointly by the Royal Australian College of General Practitioners and the Royal Australian & New Zealand College of Psychiatrists with parity of consumer and carer participation and in collaboration with states and territory mental health services and the development of the NSW Physical Health Clinician Resource package by Mindgardens Neuroscience Network, NSW

   c. Maintained with funding support through regular evidence review and updating, consistent with the Living Guidelines model

   d. Disseminated through state and territory mental health services and through private mental health services, PHNs and professional organisations and non-government organisations

   e. Standards for physical health care of people with serious mental illness to be developed based on the evidence underpinning the national clinical guidelines.

2. **Funding for tailored and shared care service provision to be provided through:**

   a. Expanded Health Assessment item number and eligibility criteria for SMI populations to be developed by the Medical Services Advisory Committee (MSAC) to the Australian Government Department of Health

   b. Case Conferencing item numbers to recognise asynchronous care coordination for people with serious mental illness to be further developed by MSAC.

3. **Removal of financial barriers for medication such as gap payments for cardiovascular risk reduction medication including metformin, and for nicotine replacement therapy, similar to provisions under the Closing the Gap strategy.**

4. **Establishment of a National Network of (Being Equally Well) Quality Collaboratives through funding support for:**

   a. An expert working group to define outcome indicators

   b. Establishment and ongoing operation of a National Collaboratives Network entity to support development and activity of local Being Equally Well Collaboratives aligned with PHNs

   c. Being Equally Well Collaborative activity cycles (waves) to support learning between participating practices, address quality improvement priorities and support implementation of protocols by early adopters.

5. **Quality improvement monitoring and reporting to be achieved by:**

   a. Establishment of a National Mental Health Clinical Quality Registry:

      i. endorsed and supported by the Australian Health Council and funded by government

      ii. with support of the Australian Commission on Safety and Quality in Health Care

   b. The Australian Commission on Safety and Quality in Health Care and the Australian Institute of Health and Welfare working with an expert working group to design and implement the National Mental Health Clinical Quality Registry to enable accurate and timely reporting on the gap in physical risk factor management, hospitalisation and mortality for people with serious mental illness compared to population norms

   c. Public reporting to the Australian Health Council annually

   d. The Australian Commission on Safety and Quality in Health Care and the Australian Institute of Health and Welfare to work with the Practice Incentive Program Advisory Group to design and collect regional and national primary care data on physical risk factors and preventative health processes for SMI populations.

6. **Workforce roles and development through:**

   a. Establishment of and funding support for working group to develop role descriptor and core competencies for nurse navigators

   b. Government funding for first 20 nurse navigators by end 2022 with commitment for staged increase to a minimum national benchmark capacity (such as one full time position per 20 GPs)

   c. Investment in research to inform optimal use of peer support workers in primary health care.

7. **Establishment of Medical Research Future Fund recurrent funding rounds supporting research into health system design and delivery for people living with serious mental illness. Priority areas for research include:**

   a. Optimal use of peer support workers

   b. Evidence of the most effective and cost effective prevention and treatment of anti-psychotic induced weight gain and metabolic syndrome in people with serious mental illness, including the use of Metformin

   c. Evidence for metabolically safer psychiatric medications and mechanisms to reduce metabolic side effects

   d. Interventions, and strategies such as social prescribing, that work effectively and cost effectively to improve diet and physical activity in people with serious mental illness

   e. Further research should include:

      i. The impact over time of the clinical registries, Collaboratives and the annual morbidity and mortality reporting

      ii. What are effective mechanisms to enhance co-operation and integration across state, federal and private systems, including the NGO sector?

      iii. What is the cost-effectiveness of mechanisms to improve service integration.

8. **Funding for development and implementation of a national advocacy campaign, for a sustained period of time, to promote awareness of the poor physical health for people with a serious mental illness and address stigma.**

9. **Education and training requirements for health professionals to be addressed through funding support for the development and dissemination of targeted education materials informed by the National Shared Care Guidelines, through the relevant professional colleges such as the RACGP, RANZCP, Pharmaceutical Society of Australia, the Royal College of Nursing, and others.**

These proposals have the potential to bring about an end to the low expectations and system dysfunction that contributes to the shorter life expectancy of people living with serious mental illness.

> **A system is more than the sum of its components. This report should be seen as the recommendation of a system rather than a 'pick-'n-mix' list of policy choices. If all components of the proposed system are introduced and resourced, the disparity in life expectancy and disease burden will be measurably and steadily reduced.**

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