

The Social and Economic Benefits of Improving Mental Health

Productivity Commission Issues Paper

Major healthcare reform is needed to provide better care and support for people with serious mental illness

Professor David Copolov AO

Pro Vice-Chancellor, Office of the Vice-Chancellor
and Professor of Psychiatry, Monash University
Professor of Psychiatry, University of Melbourne
And Professorial Fellow, Florey Institute of Neuroscience and Mental Health

Professor Tarun Bastiampillai

Professor of Psychiatry
College of Medicine and Public Health
Flinders University
SAHMRI – Mind and Brain Research Fellow

Associate Professor Geoffrey Waghorn

Research and Innovation Consultant to the ORS Group
Honorary Associate Professor, School of Clinical Medicine
The University of Queensland

Professor Assen Jablensky

Winthrop Professor of Psychiatry
Director, Centre for Clinical Research in Neuropsychiatry (CCRN)
The University of Western Australia

Professor Vaughan J Carr

University of New South Wales
Research Unit for Schizophrenia Epidemiology
O'Brien Centre at St Vincent's Hospital, Sydney.
Consultant Psychiatrist, Monash Health, Dandenong Hospital
Adjunct Professor, Department of Psychiatry, Monash University

Professor David Castle

Chair of Psychiatry
St Vincent's Hospital
The University of Melbourne

Professor Emeritus Bruce Singh AM

Formerly Cato Chair of Psychiatry at the University of Melbourne
Associate Dean (International)
Faculty of Medicine, Dentistry and Health Sciences
University of Melbourne

Assoc. Prof Stephen Allison

College of Medicine and Public Health
Flinders University
Adelaide, South Australia

Executive Summary

Approximately 3% of the population, or 800,000 Australians, have a serious mental illness (SMI), such as schizophrenia, other psychoses, and manic depression. Those with SMI experience disproportionate health, social and economic impacts equating to an estimated cost of AU \$56 billion each year in total¹ and \$1.6 billion to hospitals.² As a result, there is major potential to make transformational improvements in the quality of lives of people with SMI and decrease the economic impact of SMI to the nation.

We focus on SMI in this submission due to the significant potential to make a major difference to Australia's health, wellbeing and productivity by improving participation and care for people with SMI.

We are appropriate advocates for transformation in the care of people with SMI given our career-long dedication to clinical leadership, research, training and advocacy for better psychiatric health for the community as practicing psychiatrists in Australia.

It is with deep regret that in recent years we have seen community care and population health spending pitted directly against spending on acute and longer-term supervised care for those with persistent and severe mental illnesses.

Over the past decades, reduced spending on mental health beds in hospitals has been associated with detrimental effects on individuals and communities including prolonged emergency department (ED) wait times, higher suicide risk, premature mortality, homelessness, violent crime, incarceration and increased carer burden.³

Key performance indicators for acute and community care reward separation (end of services) within two weeks and six months respectively. Symptomatic recovery to reduce risk to individuals and communities can often be achieved in this time – but relapse and readmission is likely without true functional recovery. And when clinical recovery is not achieved in that time, people with SMI can find their case falling between the gaps in care provision. A new focus on functional recovery can drive more continuous and effective care.

We propose healthcare reform including increase of public sector mental health beds to 50 per 100,000 in the population that will support people with SMI in achieving both clinical and functional recovery across an integrated continuum of care underpinned by data-driven continuous improvement, enabled by commissioning a mental health registry. The model, shown in Figure 1, complements existing services and adds two essential elements of care for people with SMI – a network of Centres with integrated clinical care, education and research as per the world-leading exemplar, the Mayo Clinic, and embedded community care and placement services within all options for location of care.

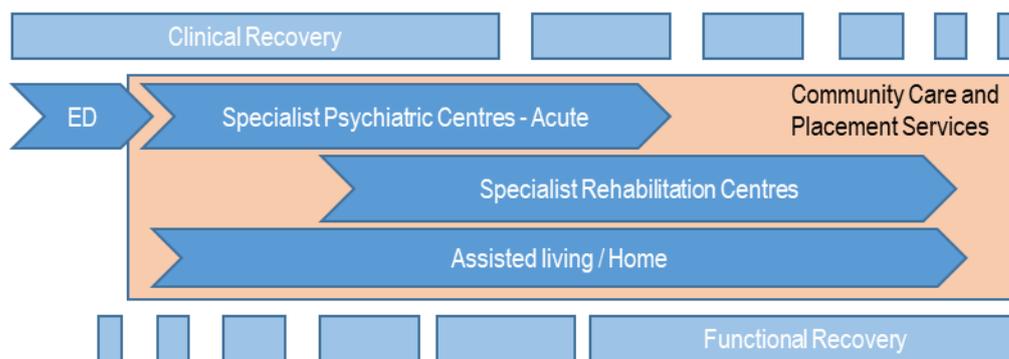


Figure 1. A model of services to support clinical and functional recovery for people with SMI

Our proposal is based on a firm belief that best care should be available for people with SMI, in parity with the level of care, support and rehabilitation that we provide for other health conditions including cancer, stroke and cardiovascular medicine. Regrettably, Australia has a healthcare system that regularly fails in relation to quality care for people with SMI. The different standards and less funding allocated to acute and long-term hospital care for people with SMI is associated with reduced quality of care and detrimental health and social outcomes.

The inclusions we propose to the healthcare system would create a robust evidence-base and an integrated, specialised care system to develop, deliver and translate best practice in mental health care and increase participation of people with severe, persistent and complex mental illness within the wider society and reduce morbidity and mortality. This would significantly improve the situation of people with SMIs, improve productivity and reduce costs to both individuals and the broader community.

¹ Royal Australian and New Zealand College of Psychiatrists (RANZCP), The economic cost of serious mental illness and comorbidities in Australia and New Zealand, 2016

² National Hospital Cost Data Collection (NHCCD) in Australian Commission on Safety and Quality in Health Care (ACSQHC). Prioritised list of clinical domains for clinical quality registry development, November 2016

³ Allison, Bastiampillai, Licinio, Fuller, Bidargaddi and Sharfstein, When should governments increase the supply of psychiatric beds? *Molecular Psychiatry* (2018) 23, 796–800

Context

Approximately 3% (800,000) of the Australian population (adults and children) experienced a serious mental illness (SMI) in the 12 months up to 31 March 2018. However, only 1.8% of the population are receiving clinical mental health care.

Due to the low rate of care for our most vulnerable mental health patients, the health system is in crisis:

- ED attendances are rising: Mental-health related presentations to emergency departments to public hospitals have nearly doubled from 69.2 presentations per 100,000 population in 2004-05 to 113.6 presentations per 100,000 population in 2016/17.⁴
- ED wait for mental health patients is significantly higher than non-mental health patients: 90th percentile ED mental health waiting times is 11.3 hours versus 7 hours for all ED presentations.⁵
- Mental health patients have disproportionately higher rates of ED access block (defined as being held in ED for longer than 8 hours) compared to non-mental health patients: As shown in Figure 2, although mental health patients represent only 4% of presentations to ED, they represent 19% of people waiting for beds and 28% of people being held in ED until a suitable hospital bed becomes available.⁶
- Inpatient average length of stay (LOS) for mental health has reduced to meet increasing ED demand: Decreased from 15.1 days in 2010-11 to 13.2 days in 2015-16.⁷
- Mental health overnight admission rates are growing to meet ED demand: 21% increase 2010-11 to 2016-17.⁸
- Mental Health Bed occupancy rates are above 95%, well above the recommended rate of 85%.⁹
- 28-day readmission rates are high – 14.9% of patients readmitted within 28 days of discharge in 2016-17.¹⁰
- Rate of incarceration is high: Almost half of prison entrants (49%) reported having been told by a health professional that they have a mental health disorder, and more than 1 in 4 (27%) reported currently being on medication for a mental health disorder.¹¹

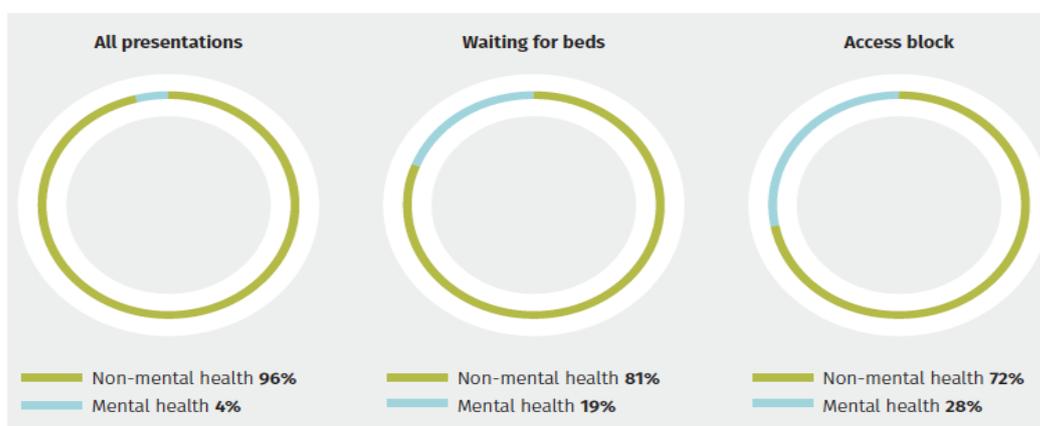


Figure 2. A snapshot survey of 64 Australian and New Zealand public EDs accredited for specialist training by ACEM in December 2017 revealed that mental health patients wait for ED beds and are held in ED beds for longer than non-mental health patients.

Although people with SMI represent a relatively small proportion of the population, they experience disproportionate negative impacts of an under-resourced healthcare system.

People with SMI experience higher unemployment, higher ED wait times for admission, high utilisation of hospital beds, higher 28-day readmission rates, higher suicide rates and higher imprisonment rates compared to non-mental health

⁴ Australian Institute of Health and Welfare (AIHW), Mental health services in Australia <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/hospital-emergency-services>

⁵ ACEM Report, The Long Wait: An Analysis of Mental Health Presentations to Australian Emergency Departments, October 2018

⁶ ACEM Report, Waiting Times in the Emergency Department for People with Acute Mental and Behavioural Conditions February 2018

⁷ AIHW, Mental health services

⁸ AIHW, Mental health services

⁹ Victorian State Government, Adult Mental Health Performance Indicator Report 2018-19 - Quarter 2, <https://www2.health.vic.gov.au/mental-health/research-and-reporting/mental-health-performance-reports/>

¹⁰ AIHW, Mental health services

¹¹ AIHW, The health of Australia's prisoners 2015, <https://www.aihw.gov.au/reports/prisoners/health-of-australias-prisoners-2015/contents/mental-health-of-prison-entrants>

related conditions. Additionally, only 22% of people with psychotic disorders were found to be in full- or part-time employment in a survey of more than 1800 representative participants and this statistic has remained unchanged since 1997.¹²⁻¹³ 13.2 in 100,000 Australians lose their lives to suicide per year, making suicide the leading cause of death for Australians between 15 and 44 years of age.

The direct and indirect economic costs of SMI to Australians are also enormous. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) estimates the annual cost of burden of SMI in Australian adults is estimated to exceed AU \$56 billion (3.5% of GDP) each year and premature death from comorbid mental and physical health conditions in people with SMI is estimated to cost Australia AU \$15 billion per annum – not including the significant costs of people with substance abuse.¹⁴

The enormous health, social and economic costs of SMI are ramifications of a policy context of reduced spending on mental health beds.

De-hospitalisation drove a decrease in mental health beds since the 1950s. Across OECD countries, average psychiatric beds per 100,000 of the population fell from 99 in 1998 to 71 in 2015. Beds per 100,000 are very low in Australia compared to OECD comparator countries, with approximately 29 government-funded mental health beds per 100,000 of the population and 12.3 beds per 100,000 in the private sector.

Unlike public sector beds which have not increased to meet rising ED demand, private sector beds have actually increased by 53%, from 8 beds per 100,000 population in 2010-11 to 12.3 beds per 100,000 population in 2016-17.¹⁵ It is of note that the private sector has responded to increasing mental health demand in stark contrast to the public-sector system which actually services the most vulnerable members of the population with SMI. A possible explanation for the differential response to rising ED mental health demand by the public sector compared to the private sector is that the commercially driven private sector has seen value in increasing of bed numbers to meet rising demand and improved care outcomes. There is also value in increasing the number of public sector beds.

De-hospitalisation has occurred in parallel to high incarceration for people with SMI in Australia threatening to proceed along the lines of the mass incarceration that followed de-hospitalisation in the US,¹⁶ massively increased burden of care on families with a member with SMI,¹⁷ and poorer care for people with SMI including an escalating ED boarding crisis.¹⁸

Reduced spending on mental health beds has often been justified by anticipated reduction in demand for mental health services as a result of population health and community care prevention and early intervention strategies and programs.

However,

- Increased spending in population health and community-based mental health services has not reduced the prevalence of SMI. In fact, results of multiple studies demonstrate improvements during multidisciplinary care are not sustained long term, and even with specialised early intervention strategies rate of relapse remains high.¹⁹
- Increased spending in population health and community-based mental health services has not lessened the demands on our hospital system. In fact, the demand on the hospital system is increasing at a rate four times population growth.²⁰ This is despite significant investment in Headspace, First Episode Psychosis Services, Better Access programs and increases in state-funded case management programs.²¹
- There is no evidence to show that intervention at onset (commonly 18-25 years of age) reduces morbidity into adulthood. The highest demand for hospital care is from people aged over 25 years, with 131,591 overnight admitted separations with specialist care as compared to 32,469 for people under 25 years of age.²²

No evidence exists that is robust enough to justify removal of acute and longer-term bedded services for people with SMI in favour of primary prevention (prior to onset of disease), early detection (also known as secondary prevention) and early intervention strategies. These strategies have largely failed to show enduring benefits.²³

As for primary prevention strategies, for SMI such as schizophrenia and other psychotic disorders, there is no known mechanism by which to prevent onset of disease (e.g., vaccination for infectious disease, cessation of smoking to

¹² Waghorn et al., 'Earning and learning' in those with psychotic disorders: The second Australian national survey of psychosis. *Australian & New Zealand Journal of Psychiatry* (2012) 46(8) 774–785

¹³ Jablensky, Epidemiology of schizophrenia: the global burden of disease and disability. *Eur Arch Psychiatry Clin Neurosci* (2000) 250: 274–285

¹⁴ RANZCP, The economic cost of serious mental illness and comorbidities in Australia and New Zealand

¹⁵ Allison, When should governments increase the supply of psychiatric beds? *Molecular Psychiatry*

¹⁶ Allison, Bastiampillai and Fuller, Mass incarceration and severe mental illness in the USA. *The Lancet* (2015) Vol 390 July 1, 2017

¹⁷ Allison, Bastiampillai and Castle, Victoria's low availability of public psychiatric beds and the impact on patients, carers and staff. *Australian & New Zealand Journal of Psychiatry* (2017) 52(1)

¹⁸ Allison and Bastiampillai, Mental health services reach the tipping point in Australian acute hospitals. *MJA* (2015) 203(11)

¹⁹ Castle, Should early psychosis intervention be the focus for mental health services? *Advances in Psychiatric Treatment* (2011) 17:398-400

²⁰ Based on AIHW mental-health related ED presentations

²¹ Jorm, Australia's 'Better Access' scheme: Has it had an impact on population mental health? *Aust N Z J Psychiatry* (2018) 52(11):1057-1062

²² AIHW, Mental health services in Australia—Overnight admitted mental health-related care 2016-17

²³ Castle and Singh, Early intervention in psychosis: still the 'best buy'? *The British Journal of Psychiatry* (2015) 207, 288–292

prevent lung cancer). Neuroscience may one day make inroads, but it is premature to build theories of causation that would be required for effective primary prevention.²⁴

Early detection and early intervention are important, lead to improvements during intervention and it is our hope that they will be proven to be successful at reducing disease for as many people as possible in the long term – but it is a reality for many individuals with SMI that they face life-long disease, either of an episodic (periods of disability and good health) or persistent nature.

High-quality care must continue past early intervention and be available for the duration of disease. Commonly, life stressors arise, medication adherence wanes or fluctuates, or other factors drive increased disability at various stages of life – in many cases (over 130,000 in 2016-17) resulting in a need for overnight specialist inpatient care. Moreover, approximately 30% of patients with SMI experience significant levels of treatment resistance. Specialist services for these Australians should be readily available.

Community care, such as the Australian Governments' newly announced expenditure on a trial for community mental health drop in centres,²⁵ is part of the solution but still leaves a gap in specialised psychiatric care for those with more severe and complex disease.

Nevertheless, in recent years, calls have been made to reduce funding for mental health beds even further so that funds can be redistributed to community care, population health prevention and early intervention strategies.²⁶

It is in this context that we submit to the Productivity Commission to reject the notion that early intervention and population health spending for prevention need to come at the expense of specialist care for people with SMI.

We submit that reform is needed to embed empirical evidence at the centre of care for people with a SMI to drive strategies to increase their health, wellbeing and participation in the community. **We ask the experts of the Commission to specifically recommend investment in evidence-based vocational rehabilitation (specifically the Individual Placement and Support approach), clinical registries, increased mental health beds across Australia, and an integrated specialised care network for people with SMI.**

A Call for Healthcare Reform

We propose healthcare reforms in direct response to a **Question on Specific Health Concerns** within the Issues Paper, *“What healthcare reforms do you propose to address other specific health concerns related to mental ill-health? What is the supporting evidence and what would be some of the benefits and costs?”*

In our experience, care for people with SMI in Australia is fractured and disjointed, with fragmented governance and a lack of longitudinal clinical and functional outcome data to provide a robust evidence-base for public health policy and care provision.

The cases of people with SMI are overseen by numerous governing organisations – hospital-based acute inpatient care, community mental health centres, non-government organisations, primary care networks, general practitioners, private specialists, federal and state government bodies, and potentially housing, corrections and other organisations.

There is no common data set or system, or shared “source of truth” by which to evaluate whether this system is working or to underpin improved integration and evaluation of the effectiveness and efficiency of services.

The data that do exist, e.g., from the Australian Institute of Health and Welfare (AIHW), signal a crisis – with a failure of existing services to keep up with the growing numbers of people presenting to ED and needing acute hospitalisation.

An integrated, specialised care network with appropriate bed numbers based on a robust evidence base is needed to improve care for people with SMI.

We advocate for four key changes to the healthcare system:

1. Increase availability of Individual Placement and Support for people with SMI integrated into care.
2. Establish clinical quality registries in Australia for sub-groups of SMI.
3. Increase public sector mental health beds to at least 50 in 100,000, based on observed outcomes.
4. Establish a network of high-quality, integrated, specialised care centres.

²⁴ Jablensky Eur Arch Psychiatry Clin Neurosci (2000)

²⁵ Australian Government Budget 2019-20

²⁶ National Mental Health Commission. Contributing lives, thriving communities. Report of the National Review of Mental Health Programmes and Services, Sydney: NMHC, 2014

1. Increase participation and employment for people with serious mental illness

A key driver in the need for health reform in the area of SMI is the opportunity for increased participation and employment for people with SMI.

Only 22% of people with SMI have been shown to be employed on a full- or part-time basis. Yet the vast majority of people with SMI report that they want to work.²⁷

There is robust evidence to show that participation in community – be it in a workplace, volunteering or participation in community groups – is associated with greater well-being, reduced symptoms of mental illness, greater social contact, greater independence, improved self-esteem, lower relapse rates, and better quality of life. Employment can act as a scaffold for personal recovery and restored personal identity by providing structure, purpose, social and economic opportunities, and reinforcing personal values.²⁸

Unemployment, on the other hand, is associated with increased likelihood of substance abuse, distress, depression, crime and suicide.

Barriers to employment for people with SMI can begin with interruptions to schooling with the first symptoms of illness often presenting in parallel with senior years of high school resulting in cascading impacts on qualifications, training and work experience.

The timing of the onset of SMI, at 18-25 years of age, offers indirect evidence that early detection and intervention for young people may arrest those cascading impacts and set them up for a lifetime of reduced disability. However, prevention and early intervention strategies have not yet been shown to change the course of future illness and participation in employment for people with SMI long-term and highest morbidity of SMI is in middle age and only abates after 45 years of age.²⁹

Support should therefore also be made available for the ongoing functional recovery of adults – with the aim of helping people across their lifespan with acute, episodic or persistent SMI prepare for, and get back to, work, training or other community participation. This is because functional recovery does not automatically follow successful treatment and care. Without serious rehabilitation, in parallel with mental health treatment, to facilitate functional recovery most people with SMI remain at risk of becoming permanently excluded from the labour market.

Australia will only succeed at helping people with SMI increase participation if the healthcare system's targets are expanded beyond clinical recovery (reduction of symptoms to a level of acceptable risk) to include functional recovery (getting back to valued social roles such as living independently, studying, working, or caring for others). Our health system should be funded beyond fee for activity to fee paid for functional outcomes achieved.

The number 1 recommendation of the OECD's 2015 recommendations to Australia was to improve GPs' lack of knowledge of the capacity of people with mental health problems to work. The OECD also recommended an improvement to the lack of efficacy of existing employment services for people with mental health problems.³⁰ These recommendations are echoed and extended within in the OECD's 2018 recommendations for New Zealand's policies on mental health and work to establish employment as a key target for mental health care, and prioritise support for mental health in the employment and welfare system, including provision of access to fully integrated psychological and employment support.³¹ The recommendations for New Zealand are highly relevant in an Australian context.

We lend our support for these OECD recommendations. Needed are coherent incentives and obligations and guidelines ratified in policy to ensure improved education, employment and social outcomes are key targets for a successful healthcare system.

As an Adherent to the OECD Recommendations on Integrated Mental Health, Skills and Work Policy, Australia has signed up to make a change and among other goals, "improve our mental health care systems in order to promote mental wellbeing, prevent mental health conditions, and provide appropriate and timely services which recognise the benefits of meaningful work for people living with mental health conditions."³²

The current most evidence-based form of vocational rehabilitation for people with SMI is the Individual Placement and Support (IPS) approach to supported employment. This approach is characterised by eight core principles which together lead to a support system that integrates vocational rehabilitation with clinical treatment and care. The employment support is highly individualised so that all those with vocational goals can participate, and the support continues past obtaining competitive employment of their choice, to retaining employment and to improving their performance and productivity at work. IPS employment specialists work closely with mental health teams and actively seek out and secure

²⁷ Waghorn et al., Australian & New Zealand Journal of Psychiatry 2012

²⁸ Waghorn and Lloyd, The employment of people with mental illness Australian e-Journal for the Advancement of Mental Health (AeJAMH) (2005) 4(2)

²⁹ AIHW, Mental health services in Australia—Overnight admitted mental health-related care 2016-17

³⁰ OECD (2015), *Mental Health and Work: Australia*, Mental Health and Work, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264246591-en>

³¹ OECD (2018), *Mental Health and Work: New Zealand*, Mental Health and Work, OECD Publishing, Paris.

<https://doi.org/10.1787/9789264307315-en>

³² OECD Recommendations on Integrated Mental Health, Skills and Work Policy OECD/LEGAL/0420

employment opportunities in the local labour market for program participants. Key features of the model are job development (creating or tailoring opportunities to fit the needs of an individual) and support for both the employer and the employee to ensure employment is sustained.³³ IPS can be augmented with additional support when needed such as social skills training or cognitive remediation.³⁴

The introduction of Supported Employment and IPS in particular in the late 1980s represented a paradigm shift in rehabilitation theory. Previously, employment support for people with SMI followed a traditional 'train then place' approach, which often involved many months of pre-vocational training and limited opportunities for people to choose their own jobs. IPS on the other hand provides a 'place then train' approach which has proven to be 2-3 times more successful than other methods of vocational rehabilitation for this group.

A good example recognised by the OECD is the Headspace program funded by the Department of Social Services (DSS) tailored to adolescents and young adults, which integrates psychology, social work, general practitioners and vocational support with close collaboration to public employment services embedded into daily practice.³⁵ The Headspace trial of IPS has in 2019 received funding to expand its IPS trial to 24 sites for people under 25 years.³⁶

Funding for IPS for youth has leap ahead in the last 15 years, IPS availability for adults with SMI has seen little growth, mostly due to the DSS trial.³⁷

IPS has already been demonstrated to be effective for adults and is ready to be implemented, with a systematic review and meta-analysis of international evidence showing it is more than twice as likely to lead to competitive employment when compared with traditional vocational rehabilitation for people with SMI.³⁸ Whereas no more than 20% of people with SMI typically return to work without support. IPS can yield rates of up to 60% or more.³⁹

As may be expected, returning to work can be a time of stress and renewed mental health difficulties. To help, the IPS employment specialist is usually co-located with a community mental health team so that a range of employment supports can be coordinated with treatment and care plans. In addition, help from mental health team members can be sought as needed to help people face and overcome the new challenges that can be encountered in any workplace.

We submit that high quality and high fidelity IPS programs should be widely available and integrated with acute and clinical care so that people with SMI are supported in their employment goals across and beyond clinical care. And we submit that such IPS programs can lead a focus on functional recovery by demonstrating that recovery in the most challenging of social roles, namely competitive employment, is not only possible but can be expected for the majority of people who have employment in mind as a core personal recovery goal.

With respect to increasing employment and participation for people with SMI, it is our final recommendation that IPS should be available for all adults with SMI. To achieve this, implementation of IPS programs with high fidelity to the core IPS principles should be coordinated across ten or more sites by one central implementation team.

Given the policy and funding model in Australia, half of the IPS sites could follow the direct employment model with employment services embedded into mental health care providers. The other half of the sites could trial partnerships with willing Disability Employment Service (DES) providers – as this can also be successful.⁴⁰

External fidelity reviews and ongoing technical support will be essential to maintain quality of implementation since there are many barriers to integrating health and vocational services brought about by many years of siloed servicing.

Policy makers should consider three factors that the OECD consider critical to success: i) the alignment of policy objectives and financial incentives; ii) rigorous implementation; and iii) on-going evaluation.⁴¹

The expected reduction in costs from implementing IPS would be generated from the regular outcomes of IPS – increased job duration, increased hours worked per week and increased wages, with estimates that inpatient costs for successful users are decreased by 50% over 10 years.⁴²

³³ OECD (2015), *Fit Mind, Fit Job: From Evidence to Practice in Mental Health and Work*, Mental Health and Work, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264228283-en>

³⁴ Tsang, Vocational outcomes of an integrated supported employment program for individuals with persistent and severe mental illness. *J Behav Ther Exp Psychiatry*. 2009 40(2):292-305.

³⁵ OECD (2015), *Fit Mind, Fit Job: From Evidence to Practice in Mental Health and Work*

³⁶ Australian Government Budget 2019-20

³⁷ Waghorn, IPS availability has not grown much for adults with SMI, whereas for youth it is leaping ahead, mostly due to the DSS trial. *Psychiatric Rehabilitation Journal* (in press)

³⁸ Modini et al., Supported employment for people with severe mental illness: systematic review and meta-analysis of the international evidence *The British Journal of Psychiatry* (2016) 2019:14-22

³⁹ Harvey, Modini, Christensen and Glozier, Severe mental illness and work: What can we do to maximise the employment opportunities for individuals with psychosis? *ANZJP Perspectives Australian & New Zealand Journal of Psychiatry* (2013) 47(5): 421-424

⁴⁰ Parletta, Waghorn and Dias, The applicability of supported employment to adults with participation obligations as a condition for receiving welfare benefits, *American Journal of Psychiatric Rehabilitation* (2017) 20:2, 106-125

⁴¹ OECD (2015), *Fit Mind, Fit Job: From Evidence to Practice in Mental Health and Work*

⁴² Harvey et al, Severe mental illness and work: What can we do to maximise the employment opportunities for individuals with psychosis? *Australian & New Zealand Journal of Psychiatry* (2013) 47(5) 421-424

2. Establish Clinical Quality Registries for SMI

Clinical quality registries are recognised as essential to delivering evidence-based care that is effective, efficient and innovative. Clinical quality registries systematically monitor the quality (appropriateness and effectiveness) of health care, for example, of SMI, by routinely collecting, analysing and reporting health-related information.⁴³

Although clinical administration data sets have been collected over many years, the most important being the Australian Mental Health Outcomes and Classification Network (AMHOCN), unlike clinical quality registries, these data sets are largely stand-alone and not longitudinal.

The data sources incorporated into clinical quality care registries are diverse, such as patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs), clinical scales, Medicare, ED and hospital data to provide a basis for identification of benchmarks and areas for improvement in clinical outcomes, including survivorship, health, quality of life and functional outcomes including employment.

Data can then be fed back to clinicians to inform clinical practice and decision-making, and also to patients to inform behaviours, improved health literacy and decision-making capacity. Improvements underpinned by clinical quality registries include health practice via feedback and discovery research, as well as policy and regulation. This feedback loop (Figure 3) is the defining feature of clinical quality registries and results in significant benefits and reduced costs.

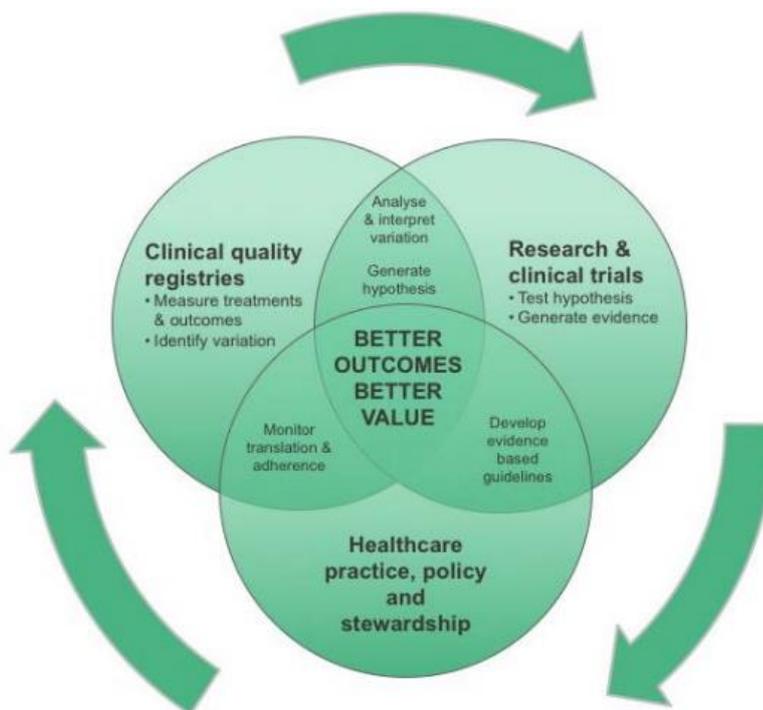


Figure 3. A self-improving synergistic health-care system.⁴⁴

Clinical registries support evidence-based decision-making to improve effectiveness and efficiency of the healthcare system. When Sweden reduced their psychiatric beds to under the OECD average, they were able to evaluate outcomes based on nation-wide patient registries, e.g., their National Quality Registry for Psychosis Care (PsykosR), to identify that the reduction in beds had likely caused a higher mortality rate amongst patients being treated for SMI.⁴⁵

Other international examples include the US disease-based schizophrenia registry 'Management of Schizophrenia in Clinical Practice' and other countries with schizophrenia registries include Malaysia, Latin America, the Netherlands, and Denmark.

Australia should similarly be able to draw upon robust data sources supporting the broader clinical system, as per Figure 4, to determine the impact of treatments for SMI including schizophrenia on long-term clinical, functional and adverse outcomes and to determine which programs to support over others based on robust evidence derived from a mental health registry.

⁴³ ACSQHC, National arrangements for clinical quality registries <https://www.safetyandquality.gov.au/our-work/information-strategy/clinical-quality-registries/>

⁴⁴ ACSQHC. Economic evaluation of clinical quality registries: Final report. Sydney: ACSQHC; 2016

⁴⁵ Allison, Molecular Psychiatry (2018)

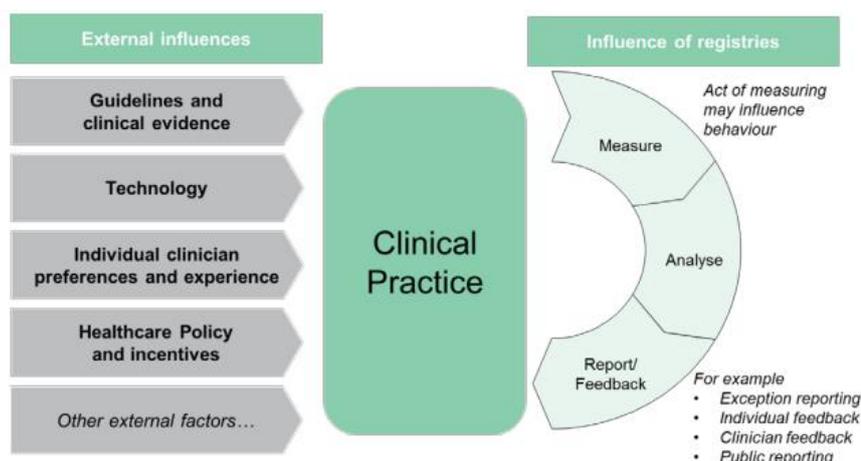


Figure 4. The position of registries within the broader clinical system⁴⁶

The lack of clinical quality registries for SMI in Australia represents a major gap in the context of good quality care and increased productivity as an outcome of good quality care. This fact has been recognised by the 2016 Australian Commission on Safety and Quality in Healthcare⁴⁷ – to which we strongly lend our support.

In the category of Mental Health, including psychosis, schizophrenia and major affective disorders – a Priority 1 rating for clinical registries was endorsed by key organisations including consumer organisations, professional organisations, Australian state and territory departments of health and the Australian Government Department of Health and Ageing.

Clinical care registries for SMIs should be prioritised as per the criteria of the Safety and Quality in Healthcare Commission: (i) there are serious consequences including suicide and incarceration for patients associated with poor quality care, (ii) a very high burden of disease and cost accounting for \$1.6 billion or 4.7% of hospital expenditure and \$56 billion per annum in total costs. Moreover, mental health accounts for an estimated 7% of burden of disease by disability adjusted life years (DALY), and (iii) there is clinician support for the registries, such as our consortium and others who can lead and influence leadership of a national network of mental health registries in Australia.

An economic evaluation of clinical quality registries conducted by Monash University and Health Outcomes Australia in 2016 on behalf of the Australian Commission on Safety and Quality in Health Care demonstrates a strong economic case for establishment of registries. The assessment of five well established clinical registries (prostate cancer, trauma, intensive care, dialysis and transplantation, joint replacement) showed a minimum expected return on investment of 4:1 if full national coverage was achieved.⁴⁸

Contributing to the cost-effectiveness of registries is the fact that the benefits they realise include reduced clinical variation with best practice being shared and implemented across the nation, precision medicine approaches, development and testing of novel, more effective treatments and evaluations of the efficacy and cost-effectiveness of services. The healthcare savings alone for evidence-based care has the potential to be enormous.

To create a registry for schizophrenia for example, would address a mental health issue of major economic costs – representing 40% (0.59 billion) of the \$1.6 billion in hospital expenditure on mental health, and would have the capacity to impact beyond this by lowering incarceration rates, decreasing homelessness, suicide and the burden on individuals and carers.

⁴⁶ ACSQHC, Economic evaluation of clinical quality registries.

⁴⁷ ACSQHC, Prioritised list of clinical domains for clinical quality registry development

⁴⁸ ACSQHC, Economic evaluation of clinical quality registries.

3. Increase public sector mental health beds to at least 50 per 100,000, based on observed outcomes and comparator analysis

We call for a specific increase of investment in public sector mental health beds to at least 50 beds per 100,000 of the population, up from its current base of 29 public sector beds per 100,000. This call is based on available comparative international data and the “observed outcomes approach” to calculating minimum and optimum bed requirements.

Currently across Australia there are 42 mental health beds (29.4 public sector and 12.3 private sector beds) per 100,000 of the population. As shown in Figure 5, this is significantly less than the OECD average of 71 beds per 100,000.



Figure 5. Psychiatric care beds per 100,000 population, 2014–2016⁴⁹

It is particularly relevant to note that advanced European economies such as France, Switzerland and Germany have bed bases well above the OECD average.

Having analysed international comparisons, the OECD expressed concerns about Australia’s mental health system amid a strong trend towards de-hospitalisation and reduced proportion of expenditure on public sector mental health beds. We share the OECD’s caution that the needs of the whole population should be met, including people with SMI who are at risk of worsening symptoms, more stays in emergency settings, and more hospital readmissions.⁵⁰

Applying the “observed outcomes approach” also makes a compelling case for increased mental health beds. This approach examines the relationship between bed numbers and key performance indicators (KPIs) for hospitals and population outcomes for people with mental illness. We submit that there are thresholds for the number of psychiatric beds below which adverse clinical and social outcomes begin to appear. As such, the development of bed targets based

⁴⁹ OECD, Hospital beds https://www.oecd-ilibrary.org/social-issues-migration-health/hospital-beds/indicator/english_0191328e-en

⁵⁰ OECD, Australia at the forefront of mental health care innovation but should remain attentive to population needs, says OECD

on the observed outcomes approach is positioned to avoid turmoil within hospital and social systems and ultimately improve the acute and longer-term outcomes for both patients and their families.

Our groups have extensively analysed and reviewed KPIs, and Australia is encountering major quality and safety issues on ED boarding, out-of-area admissions, high occupancy rates, high 28 day readmission rates, increasing rates of incarceration and an increased risk of suicide in community settings. These adverse effects worsen as total bed numbers fall below a critical range of 50–60 public sector beds per 100,000 for people with SMI.⁵¹ Additional information is available in the article, 'When should governments increase the supply of psychiatric beds?', which is provided as an attachment.

Ideally, the observed outcomes approach would be able to draw on significantly more data sources. Meta-analysis of hospital and population KPIs revealed 16 KPIs, that when used in combination, would be powerful determinants of the adequacy or otherwise of mental health bed numbers. The identified KPIs and explained in full within the attachment, 'Observed outcomes: An approach to calculate the optimum number of psychiatric beds' and listed in the table below.⁵²

Hospital KPIs

Out of area placements

Boarding in emergency rooms

Involuntary admission

Occupancy rates in psychiatric units

Average length of stay in psychiatric units

Level of acuity on inpatient wards

Discharge to homelessness

Readmission rates

Population outcomes

Rates of homelessness amongst people with SMI

Rates of people with SMI in homeless shelters

Rates of all-cause mortality

Rates of suicide

Rates of crime committed by people with SMI

Rates of incarceration amongst people with SMI

Rates of people with SMI in jails

Burden on carers

It is important to capture these KPIs as they speak directly to the burden of disease felt by patients, their families and the community including long waits for care, sub-optimal care, suicide, crime, incarceration, homelessness and carer burden.

Many of the KPIs also speak to the economic costs of mental health care. Increasing mental health beds to at least 50 per 100,000 of the population can offer economic benefits including cost savings that flow onto health and social systems by ensuring people with SMI get optimal care at the time it is needed, preventing suicide, other mortality, crime, incarceration and burden on care givers.

Clinical quality registries would ideally include measures to assess performance against all these KPIs to inform acute and non-acute bed numbers on an ongoing basis.

We submit that if a sufficient number of beds were provided there would be significant health, social and economic advantages both to patients and the broader community – including on the broad KPI outcomes described above.

⁵¹ Allison et al., When should governments increase the supply of psychiatric beds? *Mol Psychiatry* (2018) 23(4):796-800

⁵² O'Reilly, Allison and Bastiamillai, Observed Outcomes: An Approach to Calculate the Optimum Number of Psychiatric Beds. *Adm Policy Ment Health*. (2019)

4. Specialist Psychiatric Care and Rehabilitation Centres

We propose an additional 20 public sector mental health beds per 100,000 should be housed within specialised state-of-the-art centres across Australia, in all states, to fill the pressing gap in clinical care of people with SMI.

We propose these centres to provide the highest-quality clinical care and integrate discovery and translational research, and partner with community care providers and hospitals to ensure a complete and integrated ecosystem of care.

The Centres should be modelled on the Mayo Clinic and other exemplars with tripartite missions across clinical care, education and research – where patient care comes first, with teaching and research supporting recovery of patients within and beyond the Centre via highly-skilled care providers and the global translation of discovery outcomes.

Patient care would be paramount, with dignity, sensitivity, empathy and excellence at the core of care.

Transformative neuroscience, pharmacology, psychological science and other research would be central to the centres, aiding discovery of new knowledge and interventions and generating new intellectual property. This would bring with it the potential for subsequent commercialisation deals and world-wide implementation of outcomes to save and improve quality of lives for people with SMI.

Advanced training within the Centres would build capacity and capability of the next generation of clinician-researchers – making a robust network of professionals to support the long-term mental health of Australians. The excellence of these centres would attract the best and brightest practitioners internationally, further contributing to improved health and growth and productivity through clinical practice, research and training.

Regrettably, those who oppose specialised care centres often evoke the outdated notion of asylum – an isolated, cold and corrupt relic of the past with no data capture, no integration with the research community and seemingly no likelihood of discharge. But the modern reality is divorced from these examples, with high-quality, caring, patient-first, university-affiliated, co-located with hospitals, light, bright, recuperative spaces that prioritise patient welfare, safety, health and wellbeing.



Peter MacCallum Cancer Centre – An international exemplar of cancer care and oncology research



Professor Marie Bashir Centre – A place of health and recovery from mental health issues

Australia has a proud tradition of specialist hospitals, for example for cancer, women's and children's health, that offer the very best quality care for specific populations.

Care for those needing specialist treatment as an inpatient or outpatient to overcome acute physical illness and to rehabilitate back to participation in the community is a familiar and trusted concept. This is as it should become for those members of the community with SMI who need the same high level of care.

Momentum has begun with Orygen Youth Health, a centre of excellence in research, education and clinical care for adolescents and young adults with mental ill-health, and the Professor Marie Bashir Centre which hosts services including an assessment unit, acute mental health unit, short stay and inpatient programs, integrated with leading researchers.

Centres to support SMI should take two forms (i) specialised psychiatric care centres for acute cases, embedded in or alongside metropolitan hospitals such as is the case with Peter MacCallum Cancer Centre, and (ii) specialised rehabilitation focussed centres that enable more recuperative care, including for those who need longer-term care.

There is no doubt that transparent, data-driven clinical governance measure, quality assurance through frequent external review and regulation in legislation would be essential across these Centres – as is expected for the entire healthcare

system. This should be underpinned by clinical quality registries, analysing data from hospitals, patients and population-wide data sets to ensure best practice and continuous improvement.

The Centres should be governed by a Board of Directors with oversight of the Centre management teams and with direct line responsibility for performance of services to the state government. We are unaware of anything similar in a non-forensic mental health setting. The model has many strengths, including a dedicated independent board to act exclusively on behalf of the population that it serves as in the case of Royal Women's Hospital and Peter MacCallum Cancer Centre.

To further ensure transparency and enhance quality of care, the Centres should be closely linked to universities and to federal and state health departments, mental health complaints commissions, mental health tribunals and other regulatory and advocacy bodies.

Whether an individual should be admitted to a Centre should be determined through individualised assessment by an expert multi-disciplinary team as in the case of aged care – where recommendations rather than stipulations are made.

Social supports, including IPS and other community care should be embedded within the centres, so that clinical and functional outcomes are addressed in tandem with close links to community mental health centres and other supports.

The Centres should be closely connected to one another and to other research institutions, creating a powerful network for thought leadership and to attract international investment and talent. These and other connections would facilitate a continuum of care for people with SMI so that they do not continue to fall through the current cracks in the healthcare system to incarceration, homelessness or suicide.

The consequences of failing people with SMI are serious, with the potential for suicide, the capacity for significant suffering and trans-institutionalisation – the diversion of people with SMI into prisons, homelessness or marginal hostels as inhumane alternatives to proper care.

We submit that de-hospitalisation has been so aggressive that we have returned to a situation that Dorothea Dix – a famous advocate of people with SMI in the 19th Century – would feel is all too familiar. We make an urgent appeal for government intervention to transform care. This time, ensuring that the highest standards are maintained.

We estimate that the cost of implementing the Centres of care would be between \$60 and \$100 million each, and potentially more – with up to 3-4 Centres in the largest states servicing catchment populations of between 1-2 million people, and with centres focussed on particular care specialities.

This cost would amount to exponentially higher health, social and economic benefits:

- Health benefits for individuals – via the care of the Centres themselves, and translation to individuals nationally and internationally, with research outcomes of the Centre generating best practice care standards and novel treatments
- Increased efficiency through targeted, precision patient care – underpinned by registry data, which could include real-time monitoring for adverse outcomes so that swift intervention is possible to restore health
- Increased participation and employment for people with SMI – given the focus of the Centres on both symptomatic and functional recovery and embedded placement services within the Centres to help people get back to work
- Reduced burden for carers – a significant and often overwhelming burden of care for people with SMIs fall to their families and other carers. Appropriate specialised care centres for people with SMI would reduce this burden, allowing families to participate in the community in other ways, such as employment
- Improved performance of the healthcare system – the clinical services of these Centres would reduce costs elsewhere in the healthcare system, including acute hospital expenditure which is high for mental health at \$1.6 billion per year. Moreover, the research of these Centres, including clinical quality registries, would underpin continuous improvement of the healthcare sector.
- Increased capacity of the healthcare workforce – through training of the next generation of highly skilled staff across psychiatry, psychology, mental health nursing, allied health, social work, employment services, etc.
- Research and R&D investment from schemes including MRFF and NHMRC as well as philanthropy and commercial sources – driving discovery research that will underpin future innovations in mental health care.
- Commercialisation returns from IP licencing, spin-out or other commercial outcomes based on research outcomes.

Conclusion

De-hospitalisation has gone too far towards reducing mental health beds in hospitals and other institutions, leading to detrimental outcomes for people with SMI, their carers and families and the community.

Our submission calls for four changes to the health care system:

1. Increase for Individual Placement and Support (IPS) employment services for people with SMI.
2. Establish clinical quality registries in Australia for sub-groups of SMI.
3. Increase public sector mental health beds to at least 50 per 100,000 of the population.
4. Establish a network of high-quality, integrated, specialised care centres.

Clinical quality registries for SMI, once established, will be the cornerstone of evaluation for healthcare reform, including the effectiveness and efficiency of IPS, the number of mental health beds and the impact of additional inpatient and outpatient support for people with SMI. But we implore the Productivity Commission to recommend transformation of the healthcare system for people with SMI in parallel with the implementation of the registries.

There is strong evidence for the implementation of IPS, and a humanitarian need for additional care for people with SMI via additional beds and world-class centres of care.

We invite the Commission to contact us for further discussion.