Bipolar Australia Limited (ABN 35 169 187 517)
30 Griffiths Avenue West Ryde NSW 2114
www.bipolaraustralia.org.au

Mr Michael Brennan
Chair, Productivity Commission
GPO Box 1428 Canberra ACT 2604

Thursday 23 January 2019

RE: INQUIRY INTO MENTAL HEALTH – SUBMISSION REGARDING THE DRAFT REPORT

Dear Mr Brennan,

Thank you for the opportunity to provide this submission. Bipolar Australia is the peak body representing the 598,000 people affected by bipolar spectrum disorders, as well as the millions of family members and friends who support them, and the dedicated mental health professionals who work to make their recovery possible.

"During 2018-19, 41,241 people with bipolar were hospitalised, and 1,336 died by suicide, for a total cost to the taxpayer of $8.08 billion."

We estimate that bipolar accounts for 32% of all government mental health and welfare expenditure identified by the Commission, including 35% of all hospitalisation costs. We also estimate that bipolar accounts for 22% of suicidality costs, including 43.9% of all deaths by suicide. This means that of the 371,208 Australians with symptoms of bipolar during the 2018-19 financial year, 41,241 were hospitalised at least once for their condition, 203,340 received some form of income support payment, and 1,336 died by suicide, for a total cost to the taxpayer of $8.08 billion. It is therefore our strong recommendation that the Commission directly address bipolar disorders in its report.

We believe that the macro-level changes the Draft Report focuses on will not successfully address the unmet needs which fuel excess hospitalisation and draw funding away from primary care. Rather, our submission demonstrates that the key challenges for bipolar lie at the micro level: in the doctor's office, in the family home, and in the team meeting. Addressing these issues will require a new approach, beginning with a focus on quality treatment, local controlled trials which prioritise high cost mental health conditions, such as bipolar, and the development of a National Strategy for the Prevention of Mental Disorders. This will allow the knowledge and insights gained during the short term to inform a longer term renovation of the system in the future, as well as delivering upfront savings that can be reinvested in primary care. Approaching reform in this practical manner will reduce the risk of the Commission's Final Report becoming yet another casualty of the vicious cycle which has resulted in policy inertia and systemic failure in mental health.

As we demonstrate in our submission, our expertise in relation to bipolar is urgently needed so that system-wide capacity constraints can be reduced through appropriate evidence-based interventions. We intend to meet with the Commission as soon as possible in order to disclose additional confidential information, and to begin the important process of charting a path forward together.

Yours sincerely,

Prof Philip Mitchell AM
Chair, Board of Directors

Susana Bluwol
Founder and Executive Director

Bipolar Australia

Recovering together...

The Path Forward for Bipolar

Submission to the Productivity Commission Inquiry into Mental Health

Author: David Harper, Senior Project Coordinator, Bipolar Australia
Advisory Panel: S Bluwol, P Mitchell, L Russell, S Lam, C Van Til

Table of Contents

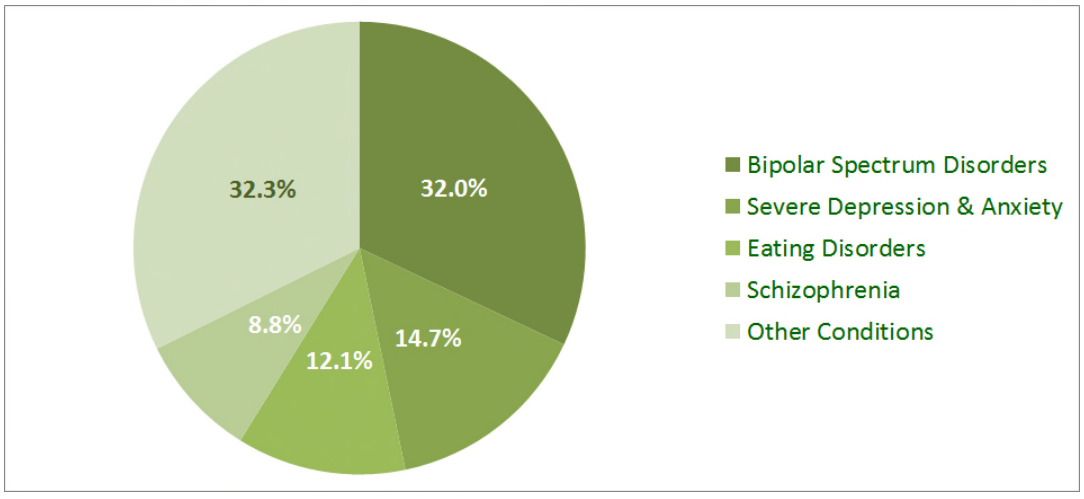
Key Issues and Recommendations

Key Issues

1. Bipolar spectrum disorders are responsible for significant expenditure and suicidality, including 32% of all identified mental health and welfare expenditure, and 43.9% of deaths by suicide.
2. The macro-level approach taken in the Draft Report will not ameliorate the micro-level issues which are impeding attempts to successfully redirect people away from high cost hospitalisation and into primary care.
3. Addressing the three complicating factors for bipolar disorder as part of local controlled trials will generate both new evidence and significant upfront savings.

Key Recommendations

1. Systemic change should be deferred in favour of addressing high cost and high impact mental illnesses, such as bipolar, directly, as well as developing a National Strategy for the Prevention of Mental Disorders.
2. The short term focus should be on quality of treatment and local clinical trials, in order to develop an evidence base and release funds currently spent on acute care for use in a longer term renovation of the mental health system.
3. As the peak body representing the condition which accounts for 32% of all mental health expenditure, Bipolar Australia should be funded to provide expert support for this important work as part of the Health Peak and Advisory Bodies Programme.



Prospective cost distribution of mental health disorders in Australia – see pp4-5 & 17-18

Executive Summary

Bipolar is responsible for significant expenditure and suicidality

- Bipolar spectrum disorders cost the taxpayer $8.08 billion in 2019, representing 32% of relevant health and welfare expenditure in Australia.
- Expenditure in relation to people with bipolar for income support and hospitalisation represents approximately 54.6% and 35% of overall government costs, respectively.
- 1,336 Australians with bipolar tragically died by suicide in 2018, representing 43.9% of all such fatalities.

Bipolar should be addressed directly by the Commission

- The centrality of bipolar spectrum disorders to the mental health system requires that the condition be specifically addressed in the Commission's Final Report.
- Successful intervention for bipolar will require a closer thematic focus on the three key complicating factors that were identified in our earlier economic analysis, namely comorbidity, carers, and cooperation.

Towards better care for bipolar

- We believe that any renovation to the mental health system should be deferred in favour of developing a National Strategy for the Prevention of Mental Disorders and commissioning local clinical trials which can deliver an expanded evidence base for future reforms.
- Prioritising optimal care for bipolar spectrum disorders has the potential to generate $9.01 billion in savings over nine years in relation to severe and moderate cases and $5.26 billion over 14 years in relation to mild cases and early intervention.
- We believe that this approach would allow for savings generated through optimal care, as well as insights gained from local clinical trials, to be used to support a long term renovation plan.

The path forward: focusing on what matters

- The Commission should refocus its Final Report on quality of treatment, as well as clinical trials that target high cost and high impact mental illnesses, such as bipolar.
- Bipolar Australia is staffed by volunteers, and will require funding in order to ensure that our specialist insights are integrated into the broader work which is needed to positively impact the lives of the millions of Australians affected by bipolar.

1. Background: Bipolar disorders in Australia

Key Points

- Over 598,000 Australians have bipolar disorders
- Our prior economic analysis of bipolar shows significant expenditure on hospitalisation and income support
- Hospitalisations for mental health are increasing 3.26 times faster than population growth

Over 598,000 Australians have lived experience of bipolar disorder, a serious mental health condition that is characterised by pronounced mood swings. It is estimated that 11.5% of these individuals are hospitalised at least once per year (Mitchell et al, 2013, Table 6), and a recent comprehensive review of suicide attempts suggest that 31.1% attempt suicide at least once during their lifetime (Tondo et al, 2016, p180). In 2018, Bipolar Australia launched a costing of bipolar spectrum disorders which confirmed the incidence rate of 2.9% reported by the Australian Bureau of Statistics in 2008 (ABS, 2008, Table 1), and estimated an annual average cost of $13,013 per person in 2016 dollars (Harper, 2017, p4).

Management of bipolar disorder in Australia remains largely in the hands of core government funded supports, with our economic analysis revealing significant expenditure biases towards hospitalisation and income support. Unsurprisingly, both the National Mental Health Commission's "Contributing Lives, Thriving Communities" strategic review and NSW Mental Health Commission's "Living Well" strategic plan called for major changes to mental health funding and system design. The National Commission called for a focus on redirecting funds from services "which indicate system failure" (National Mental Health Commission, 2014, p39), including hospitals and income support (National Mental Health Commission, 2014, p14), while the NSW Commission similarly called for shifting "the focus of mental health care from hospitals to the community" (NSW Mental Health Commission, 2014, p4).

Despite these laudable reform goals and a clear economic case for change, the system has remained stagnant, with mental health related hospital separations actually increasing 3.26 times faster than overall population growth between 2014-15 and 2017-18 (Bipolar Australia analysis of AIHW and ABS data) – a clear indication of policy failure[1]. Similarly, the "missing middle" identified by the National Mental Health Commission in 2014 (National Mental Health Commission, 2014, p33), which relates to the gap between hospital based acute care and low intensity primary care, remains a central concern five years later in the present Draft Report (Productivity Commission, 2019, p928).

[1] In our earlier analysis, we warned that "demographic analysis of the ABS data […] has identified an alarming increase in Bipolar Spectrum symptomology among Australia's young people" (Harper, 2017, p57). It is possible that this underlies some of the subsequent increase in hospitalisations.

2. Bipolar is responsible for significant expenditure and suicidality

Key Points

- Bipolar costs taxpayers $8.08 billion per annum, representing 32% of mental health related expenditure
- Bipolar related suicidality costs approximately $5.46 billion per annum, representing 22% of total costs
- 41,241 Australians with bipolar were hospitalised during FY2018-19, and 1,336 died by suicide in CY2018

The Draft Report provides new estimates of direct government expenditure on mental health, as well as additional costings for income support, hospitalisation, and suicidal behaviours. Building on our prior cost model for bipolar spectrum disorders (Harper, 2017), and current population data (ABS, 2019), we have updated our assessment of total expenditure, and estimated the likely share of key direct and indirect costs reported by the Commission (see Table 1: Cost of mental health in Australia, and bipolar disorders in Australia: Bipolar Australia analysis of Productivity Commission (PC) and Bipolar Australia (BAL) data setsTable 1, below). Separately, we have combined the Commission's cost model for suicidality with the international average for deaths by suicide and non-lethal suicide attempts in bipolar (Tondo et al, 2016).

Cost Type	Australia (PC estimate)	Bipolar (BAL estimate)	Bipolar Share (%)
Direct Government Expenditure	**$18 billion** *(Draft Finding 3.1, excludes income support)*	**$4.12 billion**	**22.9%**
Hospitalisation	$2.7 billion *(Table E.1)*	$946 million	35.0%
Income Support	**$7.26 billion *(Table 14.1)***	**$3.96 billion**	**54.6%**
Cost of Suicidality	**$24.88 billion** *(average calculated from Table 21.1)*	**$5.46 billion**	**22.0%**
Death by Suicide	$3.5 billion *(average calculated from Table 21.1)*	$1.54 billion	43.9%
Other Suicide Attempt	$21.38 billion *(average calculated from Table 21.1)*	$3.93 billion	18.4%

Table 1: Cost of mental health in Australia, and bipolar disorders in Australia: Bipolar Australia analysis of Productivity Commission (PC) and Bipolar Australia (BAL) data sets

This analysis suggests that Australians with bipolar spectrum disorders are responsible for 22.9% of all direct government expenditure reported by the Commission for Financial Year 2018-19, including 35.0% of hospitalisation costs, as well as 54.6% of relevant income support payments reported for the same period. It also reveals that bipolar accounted for up to 43.9% of the cost ascribed to suicide deaths in the Draft Report for the calendar year 2018, and 22% of the costs related to suicidal behaviours overall. A summary of our methodologies can be found in Appendix A.

Drawing on the direct government expenditure and income support costs provided in the Draft Report as a combined financial impact total, we have calculated the potential distribution of high cost conditions using economic data previously collated for the NSW Mental Health Commission (Doran, 2013) and updated for our earlier costing of bipolar spectrum disorders (Harper, 2017, pp6-7). This prospective cost distribution suggests that bipolar disorders, eating disorders, and schizophrenia represent 52.9% of total government expenditure on mental health, inclusive of income support (see Figure 1, below).

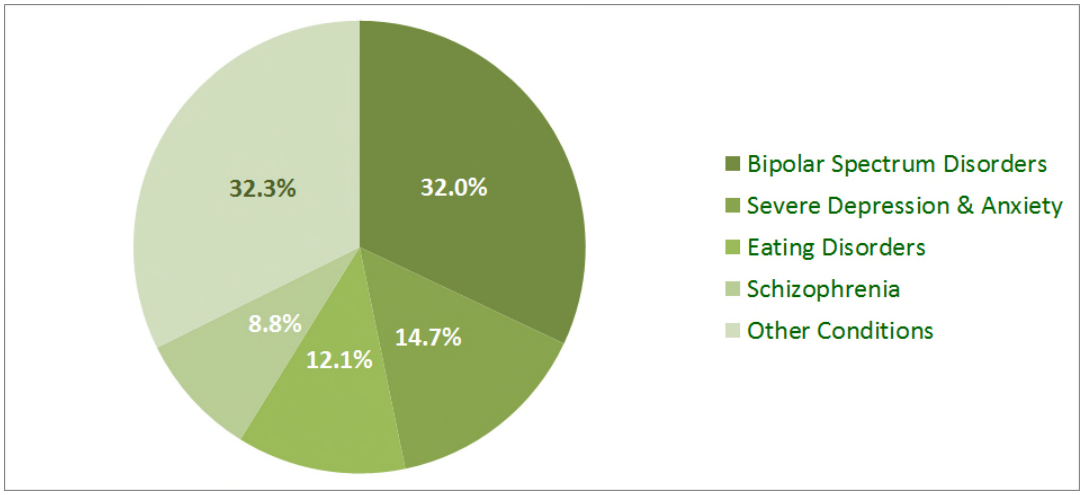


Figure 1: Potential distribution of high cost mental health conditions in Australia, as a percentage of combined mental health and income support expenditure; note that severe anxiety is costed using the severe depression per capita estimate for convenience

This high cost share, relative to the low 1.8% 12 month population incidence rate, highlights the disproportionately large role that bipolar spectrum disorders play in terms of government expenditure on mental health. Additionally, it underlines the key role that bipolar plays in the tragic and unnecessarily high rates of suicide in Australia, with 43.9% of deaths by suicide ultimately related to the condition.

In summary, Bipolar Australia estimates that of the 371,208 Australians directly affected by bipolar during the 2018-19 financial year, 41,241 were hospitalised at least once for their condition, 203,340 received some form of income support payment, and 1,336 died by suicide. These distressing numbers are indicative of a systemic failure to diagnose and manage bipolar disorders across successive decades, and emphasise the need to consider bipolar in any future reform initiatives.

3. Bipolar should be addressed directly by the Commission

Key Points

- We do not support systemic changes at this time
- The Commission should instead directly address high cost and high impact mental illnesses, such as bipolar
- Innovative facilitators that support inter-practitioner and inter-agency collaboration are needed

Broadly speaking, the Commission's Draft Report identifies a number of systemic issues which it has sought to address through either renovating or rebuilding the mental health system. In particular, the Draft Report highlights a gap between acute care and low-intensity primary health care (the so-called "missing middle") which results in part from incorrect incentives on the part of State and Territory Governments.

Bipolar Australia does not support rebuilding the mental health system at this time, and we are sceptical regarding the benefits of the proposed system renovation in the absence of measures to directly address bipolar disorder as an integral part of any major change. We believe that further funding for, and reordering of, the existing system will not positively impact people with bipolar if the individual stakeholders within the system do not address the issues which underlie many of the capacity problems that the Commission has identified. In our prior economic analysis, we identified these problems as **comorbidity**, or the high rate of co-occurring conditions in bipolar disorder, **carers**, encompassing families and friends, and **cooperation**, which relates to the team of people who are typically required to properly treat individuals with bipolar disorder.

The following sections briefly outline the centrality of these three complicating factors to the outcomes for people with bipolar, and discuss their impact in terms of the problems identified in the Draft Report. It should be noted, however, that the examples we have provided are not all-encompassing, but rather are intended to highlight the limitations of the approach taken in the Draft Report. We urge the Commission to integrate measures that specifically target bipolar spectrum disorders into its Final Report, beginning with the process-oriented recommendations we make in relation to each of the three identified themes.

3.1 Comorbidity: every person is unique

Data from the World Mental Health Survey indicates that over 85% of people with bipolar have at least one co-occurring mental health condition, and that over 70% have three or more (Merikangas et al, 2011). Previous studies have shown that co-occurring psychiatric conditions and personality disorders delay the diagnosis of bipolar (Murru et al, 2015), that comorbid anxiety, attention, and disruptive behavioural disorders reduce the time between episodes in young people (Yen et al, 2016), and that comorbid substance use, anxiety, obsessive compulsive disorders are all likely to contribute to medication non-adherence (Garcia et al, 2016).

Bipolar Australia believes that correctly identifying bipolar and any co-occurring conditions is a necessary precondition for management and recovery. This is a process which is ultimately the responsibility of individual clinicians, and independent of the structure of the health system. As the Coroner stated in relation to the death by suicide of Charmaine Dragun, "if those health professionals treating Charmaine had made the correct diagnosis of a Bipolar II Disorder she would have been properly treated with a mood stabiliser and she probably would not have committed suicide" (Coroner's Court of NSW, 2010, paragraph 711). In Charmaine's case, we believe that the presence of an earlier eating disorder made diagnosis more difficult than it would have otherwise been, although this does not absolve her treating practitioners of their contribution to her death (Coroner's Court of NSW, 2010, paragraphs 711-713; Parker, 2011, p82).

In the most recent mental health survey of England, 12.7% of people with bipolar reported that they had requested and been denied mental health treatment in primary care during the past 12 months, versus 1.4% of the general population (Marwaha et al, 2016, Table 9.10). We believe that misdiagnosis is the cause which underlies the reported denial of care. There is a consistent worldwide trend of bipolar being misdiagnosed at hospital admission (Harper, 2017, p68), and it has previously been demonstrated that this tendency also exists in Australian primary care (Lampe et al, 2013). We note that the average duration between onset and diagnosis in bipolar disorder is currently estimated to be between 8.74 and 9.6 years (Fritz et al, 2017; Drancourt et al, 2013).

Bipolar Australia believes that attempting systemic reform without addressing the key role played by comorbidities in masking severe and complex mental health conditions, such as bipolar, will not result in reduced costs, hospitalisations, or suicidality. We therefore urge that the diagnosis of such conditions, as well as commonly comorbid mental illnesses, such as ADHD and Borderline Personality Disorder, be made integral to the proposed online referral platforms (Productivity Commission, 2019, Draft Recommendation 10.2). Additionally, with regards to Information Request 5.2, we urge that General Practitioners be required to use the proposed online platform as a central diagnostic triage point when completing Mental Health Treatment Plans, and that Draft Recommendation 17.5 be amended to promote the use of the proposed online platform when Wellbeing Leaders are working with young people at risk of developing a serious mental illness. Finally, we urge that Draft Finding 25.1 be amended to acknowledge the need for systematic screening in relation to severe and complex mental health conditions and comorbidities as part of monitoring and reporting. Taken together, these changes will provide new opportunities for the detection of bipolar disorders throughout the health system, and in doing so reduce the overall cost and impact of the condition.

3.2 Carers: helpers or hindrances?

The link between carers and outcomes was first explored in schizophrenia (Butzlaff & Hooley, 1998) and subsequently found to be equally relevant for people with bipolar disorder (Scott et al, 2012). In the latter study, perceived family criticism was strongly correlated with hospitalisation, and "remained significant when controlling for age, gender, living situation, current symptoms, adherence status and [perceived sensitivity]" (Scott et al, 2012, p74).

It is noteworthy that over half of the expenditure identified in our prospective cost distribution (Figure 1, above) relates to three specific conditions with significant linkages between family and outcomes. High levels of expressed emotion have been identified as contributing to suicidal ideation in young people with bipolar (Ellis et al, 2014), relapses in adults with schizophrenia (Ng, 2019), and poorer outcomes in adolescents with eating disorders (Rienecke et al, 2016). Conversely, family focused interventions can improve outcomes for people with bipolar (Reinares et al, 2016), schizophrenia (McFarlane, 2016), and eating disorders (Treasure & Nazar, 2016).

Bipolar Australia believes that involving educating carers about bipolar provides the best possible chance for people with the condition to experience recovery. In addition, we agree with the sentiments expressed by Dr Nicholas O'Connor at the inquest into the death by suicide of Naomi Ley, where he submitted that "family members should be informed about, and where the patient consents involved in, the development of management decisions" (Coroner's Court of NSW, 2018, p36). A 2016 systematic review regarding the role of family interventions highlighted the importance of involving "relatives as a habitual part of the therapeutic management of [bipolar disorder]… tailored to each patient and relatives' characteristics and needs" (Reinares et al, 2016, p55).

We are pleased that the Commission supports the expansion of Medicare Benefits Schedule funding for carer consultations (Productivity Commission, 2019, Draft Recommendation 13.3), although we urge that this recommendation be brought forward to the short term window. However, we believe that cultural change is required to deeply integrate families and carers into the mental health system wherever possible. As a starting point, we urge the Commission to amend Draft Recommendation 5.3 to incorporate parent communication and support into the proposed headspace funding conditions. In the 2015 UNSW review of headspace, it was noted that only 46 (20.5%) of parents reported that they had "discussed ways that the family could help [the young person] to feel better" (Hilferty et al, 2015). We also urge the Commission to amend Draft Recommendation 10.4 to incorporate families and carers into the proposed care coordination framework.

3.3 Collaboration: management is a team activity

As a complex and chronic condition, bipolar often requires collaboration between health practitioners. In KPMG's actuarial analysis, it was suggested that optimal care for a person with severe bipolar disorder would involve a general practitioner, a psychiatrist, a psychologist, a dietician, a community mental health team, a psychosocial support service, and a hospital (KPMG, 2014, Table 8.1). Similarly, a 2018 review of current practice in Denmark noted that recommended modalities for a person with current symptomology of bipolar included participation of a psychiatrist, group psychoeducation, and psychotherapy (Renes et al, 2018, Table 1).

The Draft Report correctly identifies a need for additional collaboration, and proposes using care coordinators for this purpose in complex cases, as well as primary care practitioners in high intensity cases (Productivity Commission, 2019, Figure 4.1). However, there is insufficient evidence to suggest that clinicians will be responsive to this approach. For example, a systematic review of primary care practitioners' views in relation to managing adolescent mental health problems identified issues including difficulties establishing patient rapport, long and unhelpful specialist letters, lack of appropriate screening tools, absence of 'gold standard' treatments, and poor communication with other practitioners (O'Brien et al, 2016, Table 2 & Box 1).

Additionally, a subsequent systematic review regarding barriers and facilitators in relation to implementing collaborative care for depression reported difficulties including negative practitioner attitudes to shared care and frequent communication breakdowns between case managers and general practitioners (Wood et al, 2017, Table 5). Although the latter review reported that colocation could act as a facilitator for collaboration, an earlier qualitative study from Denmark contradicts this view, and similarly contracts Draft Finding 10.2. In the Danish study, it was found that merely placing relevant professionals together in a single location did not improve collaboration, with barriers including clinician disinterest in networking with other practitioners, a lack of evidence to support the colocation approach, and a lack of government mandates for collaboration being reported (Scheele & Vrangbæk, 2016). Some of these issues mirror the difficulties experienced in the Floresco Centre trial that was highlighted in the Draft Report. In particular, the lack of a government mandate (Beere et al, 2018, p16) and difficulty recruiting and retaining practitioners (Beere et al, 2018, p19) seem reminiscent of the Danish study.

Bipolar Australia believes that adequate collaboration between practitioners is a foundational requirement for recovery in high intensity and complex mental health cases. The need for teamwork was made clear by the Coroner in relation to the death by drowning of JJKD (a pseudonym) in the context of a deteriorating mental state. In JJKD's case, "[the deceased] was under the care of two treating teams simultaneously, [and] no shared care agreement between the two treating teams was available" (Coroner's Court of Queensland, 2017). As the systemic reviews cited above have noted, trust between clinicians is a prerequisite for effective shared care. In the case of JJKD, the lack of trust between the two clinical care teams was symbolised by their refusal to communicate with each other in the absence of a formal agreement; the availability of case management did not mitigate this systemic vulnerability. We believe that innovative facilitators, such as the Adaptative Mentalization-Based Integrative Treatment (AMBIT) model, will be required to deliver the inter-practitioner and inter-agency collaboration which is needed. In AMBIT, multidisciplinary teams work

within a “culture that is safe, non-blaming, and supportive of staff” (Bevington et al, 2017, pp174-5) so as to “explicitly try to keep active… the capacity of [practitioners] to make sense of themselves, their clients, and their colleagues” (Bevington et al, 2017, p31).

Although poor communication and collaboration has been identified by the Commission as a matter of relevance throughout the Draft Report (Productivity Commission, 2019, p230; p330; p524; p638; p680; p684; p872), the centrality of this issue in relation to outcomes for people with severe and complex mental illness has not been recognised. We believe that developing new governance, training, and clinical support methodologies to foster a system-wide culture of collaboration will be required in the medium to long term. As a starting point for the short to medium term, we urge the Commission to amend Draft Finding 10.2 to acknowledge the key role played by the collaboration barriers it has correctly identified (Productivity Commission, 2019, p365), and, in addition, to amend Draft Recommendation 11.1 to place forming collaborative interdisciplinary relationships at the heart of the forthcoming National Mental Health Workforce Strategy update.

In the longer term, we believe that the weak incentives to reduce hospitalisations which have been correctly identified (Productivity Commission, 2019, p941) are a key issue for both bipolar disorder and the “missing middle” of care more broadly. We therefore support the investment approach proposed in the Draft Report (Productivity Commission, 2019, pp947-48), with a focus on incentivising multidisciplinary interagency teams, rather than any individual practitioner or service. Appropriate incentives should be linked to key performance indicators such as hospitalisations and suicidality in order to reduce the opportunities for gaming (Productivity Commission, 2019, Draft Finding 25.1), and careful consideration should be given as to how negative practitioner experiences can be minimised when collaborating with others in relation to complex cases (see, e.g. Mosalski, 2019).

4. Towards better care for bipolar: quality, priority, and capacity

Key Points

- The major issues we have identified are at the micro level, particularly in relation to quality of treatment
- In the short term, high cost mental illnesses, such as bipolar, should be prioritised in local clinical trials
- Taking this approach will break the "vicious cycle" which draws funding away from primary care, by generating up to $14.27 billion in savings over 14 years

Bipolar Australia believes that significant advances in the diagnosis and management of bipolar spectrum disorders can and should be made prior to the major systemic changes that have been canvassed in the Draft Report. In addition, we strongly agree with the submission made by Professor Anthony Jorm that a focus on the quality of treatment is of fundamental importance (Jorm, 2019). Both the 'rebuild' and 'renovate' models are ultimately focused on changing the structure of the mental health system so as to increase the effectiveness of primary care options and decrease the use of high cost, hospital based care. These are macro-level reforms, and reflect a failed approach to change advocacy which has been tried before at both state and federal levels. Indeed, many of the laudable goals advocated by the Commission in its present report read are thematically similar to those previously advanced the National Mental Health Commission and the NSW Mental Health Commission.

As we have demonstrated in a thematic manner above, many of the key issues in relation to bipolar disorder fall outside this proposed focus, and instead relate to micro-level issues: in the doctor's office, in the family home, and in the team meeting. We believe that these issues afflict the mental health system more broadly, and especially for severe and complex conditions that generate much of the human and financial costs which need to be addressed. Macro-level reforms will leave these challenges largely unaddressed, and Professor Jorm's two recommendations are of therefore of significant relevance. He urges the Commission to advocate for:

- The development of a National Strategy for the Prevention of Mental Disorders (Jorm, 2019, p4); and
- Local controlled trials to develop an evidence base for future reforms (Jorm, 2019, p6).

We agree with this approach. The following sections discuss the key issue of quality by highlighting the role of general practitioners as gatekeepers, and outline our short and long term recommendations as they relate to our preferred 'renovation' model.

4.1 Bipolar in general practice: illustrating the need to focus on quality in primary care

As we have previously noted, hospitalisation data regarding bipolar disorders is severely compromised by misdiagnosis (Harper, 2017, Appendix C), and it is likely that similar issues exist in general practice. A 10 year retrospective review of primary care consultations found that "encounters involving bipolar disorder in general practice were lower than population estimates of prevalence, which may be due to several factors, including failure by GPs to accurately recognise or diagnose bipolar disorder" (Farrer et al, 2018, p6). In addition, the ATAPS data cited by the Commission showed that just 3% of people referred for psychological supports were taking mood stabilisers at the time of their referral (Bassilios et al, 2016, p9). Given the high level of unmet need in bipolar, as evidenced by the significant levels of hospitalisation and suicidality, this strongly suggests that general practitioners are failing to assist people with bipolar to take advantage of ATAPS services.

Bipolar Australia believes that screening for bipolar should be routine in cases of recurrent depression, problematic substance use, ADHD, and childhood trauma. All of these have been shown to be significant risk factors for later diagnostic conversion to bipolar (Dudek et al, 2013; Hartz et al, 2014; Chen et al, 2015; Sala et al, 2014). Even confining additional screening to patients with depression or anxiety who appear either agitated or suicidal would be a step in the right direction (Dietch et al, 2016). While we support the Commission's recommendation to stimulate market-based mechanisms for the provision of psychiatrist advice to general practitioners (Productivity Commission, 2019, Draft Recommendation 5.1), we believe it is unlikely that this service will be able to address the long term international trend toward misdiagnosis in bipolar disorder. Given the poor knowledge held by medical students regarding the role played by psychiatrists (O'Brien et al, 2015), the unhelpful views general practitioners hold regarding ADHD (Tatlow-Golden et al, 2016), and erroneous suggestions regarding over-diagnosis in bipolar (Kelly, 2018), it is unsurprising that bipolar remains so frequently undiagnosed.

Although the lack of confidence in psychiatry can potentially be reduced by direct collaboration through joint consultations (Seierstad et al, 2017), telehealth seems to require the precondition of "trust" (Productivity Commission, 2019, p207). Unfortunately, the extremely high cost per enquiry for both the GP Psych Support and GP Psychiatry Support Line (Productivity Commission, 2019, p207) makes it possible to infer that primary care practitioner uptake was low, while the 99% satisfaction rate also suggests that typical callers were physicians with unusually high levels of confidence in psychiatry. In essence, these services achieved minimal market penetration because they did not address the key issue of general practitioner confidence in the psychiatric speciality.

Although general practice does fall within the Draft Report's scope, both of the reform options presented focus on large, regional changes (Productivity Commission, 2019, Draft Recommendation 7.1). However, the major capacity constraint that has resulted in ongoing misdiagnosis may be simple uncertainty on the part of physicians, rather than complex systemic failures. Discomfort in general practice decision making is not a new phenomenon (e.g. Bradley, 1992), and uncertainty remains both "common" and capable of making practitioners "uncomfortable" (Rich, 2015). In addition to manifesting in primary care, uncertainty is known to contribute to medical errors in

emergency departments (Zavala et al, 2018, p399). In a 2017 study of Australian general practice trainees, diagnostic or treatment uncertainty resulted in increased reluctance to disclose doubts to patients, especially when trainees had prior medical knowledge, worked in urban areas, or worked in regions with a higher social-economic status (Cooke et al, 2017). A recent systematic review has suggested that dealing with uncertainty forms part of the "informal curriculum" for medical trainees, and recommended the incorporation of standardised training to "facilitate a shift from implicit or reactive informal learning to more deliberate forms, where a modification of skills and behaviours is also more probable to occur" (Rothlind et al, 2020, preprint).

The uncertainty surrounding the reasons for poor diagnosis highlights the value of Professor Jorm's recommendations. Research from the United Kingdom suggests that mandating more referrals paradoxically risks increasing practitioner reluctance to refer (Kostopoulou et al, 2019). Both this study, which related to cancer referrals, as well as the earlier Australian study of general practitioner and psychiatrist bipolar diagnoses (Lampe et al, 2013), ultimately recommended further training for primary care physicians. While the Draft Report calls for improved mental health training (Productivity Commission, 2019, Draft Recommendation 11.5), it is unclear whether this will achieve the desired results. Instead, the proposed National Strategy for the Prevention of Mental Disorders should focus on general practice and emergency department misdiagnosis as a critical issue, and appropriate clinical trials should then be undertaken to determine the most appropriate mitigations, including better training and subspecialty registration if required.

Regardless of any systemic reforms, and as an interim measure to better inform the proposed National Strategy, we believe that the recommendation to strategically fill data gaps (Productivity Commission, 2019, Draft Recommendation 25.3) has significant merit. We therefore urge the Commission to incorporate screening statistics in relation to conditions with disproportionate impacts, including bipolar, into this strategy. This would provide data regarding the frequency of bipolar screening in primary and emergency care, and potentially reveal patterns which would guide decision making regarding future interventions.

4.2 The short term: prioritising bipolar to reduce demand

Cost in the mental health system is driven by the expensive hospitalisation at its core. We note that many of the proposals that have been made to address the impact of severe mental illness (Productivity Commission, 2019, Figure 26.2) will require additional funding, and highlight the critical insight provided by the NSW Mental Health Commission that the "lack of care in the community increases pressure for expensive inpatient mental health care, which draws more money from community-based services" (NSW Mental Health Commission, 2014, p55).

There are two potential ways to break this "vicious circle": firstly, temporarily allocate more funding to community-based services regardless of escalating inpatient costs; or, secondly, strategically address key demand drivers, such as bipolar disorders, in a systematic manner, so as to achieve short term cost savings that can then be reinvested in expanded primary care. For the 2018-19 financial year, we estimate that bipolar disorders accounted for 35% of all government expenditure on mental health hospitalisation. If Australia's primary care system handled bipolar as effectively as England's, the total cost of managing the condition would decline by approximately 14.67% (Harper, 2017, p6), or $1.19 billion per annum (in 2018 dollars).

In the short term, Bipolar Australia believes that addressing the three complicating factors for bipolar disorder, discussed above, as part of local controlled trials will generate both new evidence and significant upfront savings. In an earlier study undertaken for the National Mental Health Commission, KPMG estimated that successfully implementing optimal care for a person with severe bipolar disorder would save $674,000 over nine years (KPMG, 2014). Although we were unable to replicate some of KPMG's envisioned cost savings, we did find that optimal care would deliver $9.01 billion (in 2016 dollars) over nine years by targeting the 11.11% of people with bipolar hospitalised within the 12 months prior to the start of intervention (Harper, 2017, p11). In addition, we found that targeting people currently affected by bipolar who have not recently been hospitalised and prioritising early intervention would deliver an additional $5.26 billion in savings over 14 years (Harper, 2017, p11 & p15). In these trials, bipolar disorders would need to be specifically and proactively targeted, with a particular focus on reducing hospitalisation and suicidality.

In a recent qualitative study of United States primary care practitioners, barriers to diagnosis included urgent presenting issues, lack of clinical knowledge, and uncertainty about issues such as screening, while barriers to treatment included poor communication with specialists, difficulty making medication adjustments between specialist visits, and limited prescribing expertise (Cerimele et al, 2019). As we have noted above, we believe that the issues identified overseas are of significant relevance to Australian general practice. While adequate trials will be needed to confirm our approach, our review of the literature suggests that developing a web based hub to support people with bipolar, their families, and their care providers can begin to mitigate many of these difficulties and, in particular, reduce practitioner uncertainty.

We also support the Commission's recommendation to expand access to online treatment more broadly (Productivity Commission, 2019, Draft Recommendation 6.1), especially in light of recent qualitative data suggesting that Australian general practitioners are open to using web based mental health services (Kerry et al, 2018). However, we caution that such options will be of limited usefulness in the absence of modules to detect and manage bipolar disorders (e.g. Gaynes et al, 2010), and suggest that care coordination should be separately delivered via the proposed web based hub. We also concur with the observation that face to face treatment remains the preferred option for bipolar disorders (Productivity Commission, 2019, p270), and note the low uptake of online support for the condition (Bauer et al, 2017).

Bipolar Australia would be pleased to work with the Commission and other relevant stakeholders to design cost-effective interventions which can be trialled and then implemented to generate the savings needed to make a down-payment on longer term reforms. We also believe that targeted early intervention for bipolar should be a key part of the much needed National Strategy for the Prevention of Mental Disorders. Additionally, we support the robust focus on evaluation proposed in Draft Recommendation 22.5. However, we urge the Commission to recommend that annual planning cycle consultations incorporate a specific emphasis on mental health conditions which are disproportionately affecting either costs or suicidality, such as bipolar, at the time of each review, in addition to the two existing proposed areas of focus.

Although we do not support the immediate renovation of the mental health system, we do strongly agree that Primary Health Networks (PHNs) should have autonomy regarding funding for headspace centres (Productivity Commission, 2019, Draft Recommendation 24.2). The headspace program has consistently failed to demonstrate a positive impact (Jorm, 2018; Hilferty et al, 2015). While a reduction in deterioration for severe mental illness does appear to have been achieved in recent years, the major explanation seems to be treatment intensity (Cross et al, 2018, p559), and, crucially, the headspace program is ultimately limited by the same funding capacity constraints as the rest of the primary care system (Hilferty et al, 2015, pp88-9). Giving decision making autonomy to PHNs would allow for additional funding to be provided to certain headspace centres within regions if this is deemed necessary, or, alternatively, for scarce resources to be reallocated elsewhere.

We also agree that private health insurance companies should be given more scope to fund community based mental health care (Productivity Commission, 2019, Draft Recommendation 24.5). Despite the fact that mental health consumers are less likely than other Australians to purchase private health insurance (Leach et al, 2012), we have previously estimated that insurers spent $173.5 million on private hospital admissions for customers with bipolar during the 2014-15 Financial Year (Harper, 2017, p7). If the Commission is correct in costing total insurer disbursements for mental health at $500 million (Productivity Commission, 2019, Table E.1), we estimate that hospitalisation for bipolar accounted for around 37% of this expenditure. Granting insurers more flexibility in the mental health space could therefore incentivise the development of innovative approaches to managing risk, and in turn create opportunities for future evidence based reforms to be adopted by government-funded services.

The Draft Report highlights a concern that psychiatrists are "providing psychological interventions… which could just as effectively be delivered by low-intensity therapy coaches" (Productivity Commission, 2019, p370). Although the Commission has primarily focused its concern on less severe disorders, it is likely that many of these "inefficient" psychiatric consultations are in fact necessary and related to bipolar. We believe that this overuse of psychiatrist time is a result of the comparatively lower frequency of evidence based and adequate treatments currently available in general practice (Harris et al, 2015) and the need for ongoing medication supervision. There is a reciprocal association between psychosocial factors and mood (Koenders, 2016, pp126-29), while there is also an association between the therapeutic alliance and treatment adherence (Chakrabarti, 2018). This makes regular consultations with psychiatrists far more practicable than current alternatives. As a result, innovative collaborative arrangements such as AMBIT, the Floresco model (both discussed above), and PARTNERS (Baker et al, 2019) should be piloted to build the evidence base for team-based care and reduce the need for psychiatrist consultations over the medium to long term.

4.3 The long term: a renovated mental health system

Bipolar Australia believes that renovating the mental health system in the manner proposed by the Commission will deliver some benefits, once severe and complex mental health conditions such as bipolar disorder are directly incorporated into planning, implementation, and reporting processes, and through the insights that will be gained during the development of the proposed National Strategy for the Prevention of Mental Disorders and analysis of the proposed local clinical trials. However, we believe that the potential for cost-shifting remains high so long as the Medicare Benefits Schedule and the National Disability Insurance Scheme remain largely outside any proposed remodelling. Although Draft Recommendation 24.1 takes important steps towards reducing this cost-shifting, much of the demand relating to bipolar disorders arises from the complex factors we have identified above, rather than the availability of out-of-hours general practitioners or rebates for allied mental health professionals. We therefore urge the Commission to amend Draft Recommendation 25.4 to incorporate monitoring of funding and cost-shifting variables, as well as indicators of potential gaming, into the proposed National Mental Health Commission reporting priorities.

Additionally, we urge the Commission to track hospitalisation and emergency department visits as an indicator for the "right care at the right time" outcome (Productivity Commission, 2019, Table 25.2), as optimal care should produce far fewer hospital separations for people with bipolar. In the longer term, we suggest that the National Mental Health Commission facilitate the development of live data collection from across the mental health system, so that statistics can be accumulated and analysed in real time (Productivity Commission, 2019, Information Request 25.3).

Primary Health Networks (PHNs) will continue to play an important role in a renovated system. In relation to Information Request 24.1, we believe that the PHN funding should be linked to a formula which uses projected rebate levels, for example based on population growth trends, as the primary data source, while also incorporating past rebate data to facilitate a national reserve funding pool that can provide a financial cushion in circumstances where demand is projected to fall due to population changes or other relevant factors, but subsequently does not decline. This integrated approach would minimise the risk of funding shortfalls while also allowing PHNs to plan based on the best available future projections.

Stigma is one of the factors underlying misdiagnosis in bipolar, as it reduces help-seeking behaviour (Stiles et al, 2018, pp417-18) and increases treatment barriers in primary care (O'Brien et al, 2016, Figure 3). We therefore strongly support the development of a National Stigma Reduction Strategy (Productivity Commission, 2019, Draft Recommendation 20.1). However, we have previously catalogued the long history of failed health promotion initiatives (Harper, 2017, p41), and note a more recent meta-analysis which calls for more research due to difficulties pinpointing the "active ingredients" (Morgan et al, 2018). We urge the Commission to amend the Draft Recommendation to focus short-term efforts on the development of suitable evidence-based interventions as a primary outcome, and to ensure that the Stigma Reduction Strategy is aligned with the proposed Strategy for the Prevention of Mental Disorders.

5. The path forward: focusing on what matters

Key Points

- Successful long term renovation is more likely to be achieved if short-term adjustments are made first
- Focusing on quality treatment and clinical trials will deliver new evidence, and release funds, for reform
- Bipolar Australia is unfunded, and requires financial support to ensure that our critical insights are not lost

In recent years, the promise of mental health reform has been limited by a lack of new money to support proposed initiatives. Bipolar Australia emphasises that the long term renovation envisioned by the Commission is far more likely to be achieved if short term adjustments can be made to the current mental health system in order to reduce demand for expensive hospitalisation services. Insights and data that are collected during the clinical trials we have advocated for as part of the proposed short term prioritisation strategy are likely to provide valuable new information that will shape the longer term changes which the Commission is seeking to achieve.

We strongly urge the Commission to refocus its Final Report on the staged approach we have recommended: firstly, developing measures to improve quality in primary care; secondly, breaking the "vicious cycle" by delivering a National Strategy for the Prevention of Mental Disorders and trialling innovative approaches to high cost and high impact mental illnesses, such as bipolar disorder, in local clinical trials that focus on reducing hospitalisation and releasing funds for reinvestment in primary care; and finally, using the experiences gained and funds earned through these processes to more effectively renovate the nation's mental health system. This approach will allow for the creation of a "virtuous cycle" that begins by generating short term savings from reduced hospitalisation, permitting a first round of reinvestment in high-value primary care services whose effectiveness has been proven through local controlled trials, and then reducing both hospitalisation and costs again in a second round, as longer term systemic change begins to occur.

Bipolar Australia is currently staffed by volunteers, and does not receive any ongoing funding. In order for the work we have undertaken since 2014 to be integrated the National Strategy for the Prevention of Mental Disorders and the forthcoming local clinical trials, we will require operating funds. The present lack of ongoing support creates a significant and unacceptable risk that the specialist knowledge we have acquired, and continue to develop, could be lost. Our organisation is unique in combining the grass roots lived experience of people affected by bipolar, including people with the condition and their families and carers, with the expertise of mental health professionals. This multidisciplinary approach breaks down silos and delivers insights which are, and will continue to be, needed if systemic reform is to be successful.

We urge the Commission to assist us with this financial challenge, for example by lobbying for our inclusion in the Health Peak and Advisory Bodies Programme. Once our internal resources can be released from this critical sustainability focus, we look forward to working together with the Commission, along with other relevant stakeholders, to shape the Final Report into a practical and meaningful strategy that can positively impact the lives of hundreds of thousands of Australians with severe and complex mental illnesses.

In the immediate term, we are eager to engage with the Commission in order to hasten the process of understanding the data which underlies both our earlier economic analysis and this submission. Both of these documents rely on underlying financial and statistical calculations, and we expect that access to this confidential and proprietary information will be needed in order to avoid unnecessary confusion and delays. We look forward to meeting with the Commission over the coming days to share our strategy for positively impacting the lives of the 598,000 Australians with bipolar, as well as their families, carers, and communities.

Appendix A: Costing Methodologies

A1. Cost of bipolar disorders in Australia

Bipolar Australia's government expenditure estimates are based on an analysis we launched in 2018, which utilised data from KPMG, the Australian Institute of Health and Welfare, the Australian Bureau of Statistics, and others, to develop a per-capita and total government cost for bipolar disorders. These costs were calculated by assessing earlier work commissioned by the National Mental Health Commission (KPMG, 2014) and generalising the three reported categories (severe, moderate, and mild) to represent the entire population with bipolar, as reported in the National Survey of Mental Health and Wellbeing (ABS, 2008; Mitchell et al, 2013).

As part of this work, we developed an independent model for one of the three categories, which confirmed KPMG's earlier costing. We also analysed hospital separations in an effort to resolve the discrepancy between Australian Institute of Health and Welfare data and the hospitalisation numbers reported in the National Survey of Mental Health and Wellbeing, and found that while AIHW data consistently underreports bipolar-related hospitalisations, KPMG's suggested cost per admission was too high. Finally, we compared the Bureau of Statistics' reported incidence level for bipolar with relevant international data, and found that Australia's reported 1.8% 12 month incidence rate was extremely similar to the reported 1.9% prevalence in primary care (Stubbs et al, 2016).

To confirm our per-capita cost finding for bipolar spectrum disorders in Australia, we cross-checked our estimate with the United Kingdom, where an entirely different approach, sourced from existing peer reviewed literature (McCrone et al, 2008) and incidence data (Marwaha et al, 2016), was used. This methodology incorporated an estimate for informal care, which we removed, and did not segment the population with bipolar. Our cross checking revealed that the slightly lower per capita cost in the United Kingdom was almost entirely explained by a lower rate of hospitalisation. If Britons were hospitalised for bipolar at the same rate as Australians, the difference between total costs would have been a mere $258 per person, or less than 2% of the overall per capita cost.

A2. Income support payments for bipolar

Due to the extent of the work that both KPMG and Bipolar Australia have already undertaken to cost bipolar in Australia, we believe that our updated $3.96 billion total for income support expenditure is correct, despite the seemingly large proportion of reported total welfare expenditure. We note that unemployment is consistently high in bipolar disorders, and that in our original analysis we projected that only 34% of people with bipolar were in receipt of a government payment. This estimate remains conservative, and we suggest that the Commission's totals for income support payments, which no doubt rely on Centrelink data (Productivity Commission, 2019, Table 14.1), may be too low.

There are two factors which may have resulted in a miscalculation of mental illness related income support costs by the Commission. Firstly, the comorbidity related misdiagnosis which characterises bipolar (see discussion in main text) is likely to be relevant in terms of the deeming undertaken by Centrelink and relied upon by the Commission for its overall estimates. In particular, substance use may no longer be regarded as "mental illness" for the purposes of Newstart and Youth Allowance Jobseeker (Department of Social Services, 2018), despite high rates of people with mood and anxiety disorders self-medicating with alcohol or drugs (Turner et al, 2018).

Secondly, the income earning potential of people with bipolar is low. An Israeli study found that the percentage of people hospitalised for bipolar earning the minimum wage or above was just 24.2% (Davidson et al, 2016), while a long-term Danish records review found that the average income of a person with bipolar was just 36% of the national average (Hakulinen et al, 2019). This suggests that a proportion of Age Pension and Carer Allowance recipients would, but for their bipolar disorder and resulting lower income, be ineligible for these payments due to being above the relevant thresholds, and should be counted in the overall expenditure total.

A3. Cost of bipolar related suicidality

Bipolar Australia has not previously provided a preliminary estimate for the cost of suicidality in bipolar spectrum disorders (Harper, 2017, p14). However, the Commission's calculations have provided the impetus to cost suicidality in bipolar for the 2018 calendar year. To calculate the average costs of suicide deaths, attempts leading to incapacity, and other attempts, we averaged the higher and lower cost estimates provided in the Draft Report, as well as combining the totals for the two non-lethal costs into a single attempt estimate. This suggested a cost of $1,150,000 per death by suicide and a cost of $272,982 per suicide attempt (most of which derives from attempts resulting in permanent incapacity). We note that our per capita estimate of $1,150,000 per death is significantly less than the $1,661,128 predicted for youth suicide in a recent Australian analysis (Kinchin & Doran, 2018).

These per-death and per-attempt cost averages were then applied to the international suicidality rates for bipolar reported in the journal Acta Psychiatrica Scandinavica (Tondo et al, 2016). This study drew on 101 earlier reports encompassing 79,937 subjects, and reported a yearly suicide attempt rate of 4.24% and a yearly death by suicide rate of 0.36%. This compares with rates of approximately 0.32% and 0.012% in the general population (Bipolar Australia analysis of ABS and Productivity Commission data). The likelihood that an attempt will result in death was 8.5% for bipolar and 3.7% for the general population. We note that the heightened risk of death by suicide for men observed in the Draft Report (Productivity Commission, 2019, p845) is higher in the general population than for people with bipolar (Tondo et al, 2016, pp181-82). It is therefore likely that bipolar disorders disproportionately impact completed suicides by women, after controlling for other factors.

Appendix B: References

- Australian Bureau of Statistics (2008), *National Survey of Mental Health and Wellbeing: Summary of Results*. Catalogue No. 4236.0.
- Australian Bureau of Statistics (2019), *Australian Demographic Statistics, June 2019*. Catalogue No. 3101.0.
- Baker E, Gwernan-Jones R, Britten N, et al (2019), *Refining a model of collaborative care for people with a diagnosis of bipolar, schizophrenia or other psychoses in England: a qualitative formative evaluation*. BMC Psychiatry. 2019;19(1):7.
- Bassilios B, Nicholas A, Reifels L, et al (2016), *Achievements of the Australian Access to Allied Psychological Services (ATAPS) program: summarising (almost) a decade of key evaluation data*. Int J Ment Health Syst. 2016;10:61.
- Bauer R, Conell J, Glenn T, et al (2017), *International multi-site survey on the use of online support groups in bipolar disorder*. Nord J Psychiatry. 2017;71(6):473-476.
- Beere D, Page IS, Diminic S, Harris, M (2018), *Floresco Centre Service Model Evaluation: Final Report*. Queensland Centre for Mental Health Research report to the Queensland Mental Health Commission, June 2018.
- Bevington D, Fuggle P, Cracknell L et al (2017), *Adaptive Mentalization-Based Integrative Treatment, A Guide for Teams to Develop Systems of Care*. Oxford University Press; 2017. ISBN 978-0198718673.
- Bradley CP (1992), *Uncomfortable prescribing decisions: a critical incident study*. BMJ. 1992;304(6822):294-6.
- Butzlaff RL, Hooley JM (1998), *Expressed emotion and psychiatric relapse: a meta-analysis*. Arch Gen Psychiatry. 1998;55(6):547-52.
- Cerimele JM, Fortney JC, Pyne JM, Curran GM (2019), *Bipolar disorder in primary care: a qualitative study of clinician and patient experiences with diagnosis and treatment*. Fam Pract. 2019;36(1):32-37.
- Chakrabarti S (2018), *Treatment alliance and adherence in bipolar disorder*. World J Psychiatry. 2018;8(5):114-124.
- Chen MH, Chen YS, Hsu JW, et al (2015), *Comorbidity of ADHD and subsequent bipolar disorder among adolescents and young adults with major depression: a nationwide longitudinal study*. Bipolar Disord. 2015;17(3):315-22.
- Cooke G, Tapley A, Holliday E, et al. (2017), *Responses to clinical uncertainty in Australian general practice trainees: a cross-sectional analysis*. Med Educ. 2017;51(12):1277-1288.
- Coroner's Court of NSW (2010), *Inquest into the death of Charmaine Margaret Dragun*. File No. 2000/07, 15 October 2010.
- Coroner's Court of NSW (2018), *Inquest into the death of Naomi Watson Ley*. File No. 2015/186664, 3 May 2018.
- Coroner's Court of Queensland (2017), *Non-inquest findings into the death of JJKD*. File No. 2016/8, 17 August 2017.
- Cross SP, Scott JL, Hermens DF, Hickie IB (2018), *Variability in Clinical Outcomes for Youths Treated for Subthreshold Severe Mental Disorders at an Early Intervention Service*. Psychiatr Serv. 2018;69(5):555-561.

- Davidson M, Kapara O, Goldberg S, et al (2016), *A Nation-Wide Study on the Percentage of Schizophrenia and Bipolar Disorder Patients Who Earn Minimum Wage or Above*. Schizophr Bull. 2016;42(2):443-7.
- Department of Social Services (2018), *Social Security Guide: 3.2.11.10 Mutual Obligation Requirements for NSA/YA Job Seekers/YA Students - Exemptions - Temporary Incapacity*. Guides to Social Policy Law, as at 2 July 2018.
- Dietch DM, Nicolson Macritchie KA, Young AH (2016), *Re: Unrecognised bipolar disorder among UK primary care patients prescribed antidepressants: an observational study: where to from here?* Br J Gen Pract. Letters, 16 February 2016.
- Doran CM (2013), *The evidence on the costs and impacts on the economy and productivity due to mental ill health: a rapid review*. Report to the Mental Health Commission of NSW, April 2013.
- Drancourt N, Etain B, Lajnef M, et al (2013), *Duration of untreated bipolar disorder: missed opportunities on the long road to optimal treatment*. Acta Psychiatr Scand. 2013;127(2):136-44.
- Dudek D, Siwek M, Zielińska D, et al (2013), *Diagnostic conversions from major depressive disorder into bipolar disorder in an outpatient setting: results of a retrospective chart review*. J Affect Disord. 2013;144(1-2):112-5.
- Ellis AJ, Portnoff LC, Axelson DA, et al (2014), *Parental expressed emotion and suicidal ideation in adolescents with bipolar disorder*. Psychiatry Res. 2014;216(2):213-6.
- Farrer LM, Walker J, Harrison C, Banfield M (2018), *Primary care access for mental illness in Australia: Patterns of access to general practice from 2006 to 2016*. PLoS ONE. 2018;13(6):e0198400.
- Fritz K, Russell AMT, Allwang C, et al (2017), *Is a delay in the diagnosis of bipolar disorder inevitable?* Bipolar Disord. 2017;19(5):396-400.
- García S, Martínez-Cengotitabengoa M, López-Zurbano S, et al (2016), *Adherence to Antipsychotic Medication in Bipolar Disorder and Schizophrenic Patients: A Systematic Review*. J Clin Psychopharmacol. 2016;36(4):355-71.
- Gaynes BN, Deveaugh-Geiss J, Weir S, et al (2010), *Feasibility and diagnostic validity of the M-3 checklist: a brief, self-rated screen for depressive, bipolar, anxiety, and post-traumatic stress disorders in primary care*. Ann Fam Med. 2010;8(2):160-9.
- Hakulinen C, Musliner KL, Agerbo E (2019), *Bipolar disorder and depression in early adulthood and long-term employment, income, and educational attainment: A nationwide cohort study of 2,390,127 individuals*. Depress Anxiety. 2019;36(11):1080-1088.
- Harper, D (2017), *Achieving Cost Savings in Bipolar Disorder: A Preliminary Evaluation*. Bipolar Australia research report, December 2017.
- Harris MG, Hobbs MJ, Burgess PM, et al (2015), *Frequency and quality of mental health treatment for affective and anxiety disorders among Australian adults*. Med J Aust. 2015;202(4):185-9.
- Hartz SM, Pato CN, Medeiros H, et al (2014), *Comorbidity of severe psychotic disorders with measures of substance use*. JAMA Psychiatry. 2014;71(3):248-54.
- Hilferty F, Cassells R, Muir K, et al (2015), *Is headspace making a difference to young people's lives? Final Report of the independent evaluation of the headspace program*. UNSW Social Policy Research Centre report to the Australian Government Department of Health, August 2015.

- Jorm AF (2018), *Concerns About the headspace Model of Youth Mental Health Services*. Psychiatr Serv. 2018;69(7):838-839.
- Jorm AF (2019), *Submission to the Productivity Commission Enquiry into Mental Health*. Productivity Commission Submission 45, March 2019.
- Kelly T (2018), *Prospective: Is bipolar disorder being overdiagnosed?* Int J Methods Psychiatr Res. 2018;27(3):e1725.
- Kinchin I, Doran CM (2018), *The Cost of Youth Suicide in Australia*. Int J Environ Res Public Health. 2018;15(4).
- Koenders, M (2016), *Tangled up in mood: predicting the disease course of bipolar disorder*. Leiden University dissertation, April 2016. ISBN 978-90-6464-983-7.
- Kostopoulou O, Nurek M, Cantarella S, et al (2019), *Referral Decision Making of General Practitioners: A Signal Detection Study*. Med Decis Making. 2019;39(1):21-31.
- KPMG (2014), *Paving the way for mental health: The economics of optimal pathways to care*. Report to the National Mental Health Commission, November 2014.
- Lampe L, Fritz K, Boyce P, et al (2013), *Psychiatrists and GPs: diagnostic decision making, personality profiles and attitudes toward depression and anxiety*. Australas Psychiatry. 2013;21(3):231-7.
- Leach LS, Butterworth P, Whiteford H (2012), *Private health insurance, mental health and service use in Australia*. Aust N Z J Psychiatry. 2012;46(5):468-75.
- Marwaha S, Sal, N, Bebbington S (2016), *Bipolar disorder* in McManus S, Bebbington P, Jenkins R, Brugha T. (eds.), *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014* (pp220-237). NHS Digital, September 2016.
- McCrone P, Dhanasiri S, Patel A, et al (2008), *Paying the price: the cost of mental health care in England to 2026*. Report by the King's Fund, May 2008.
- McFarlane WR (2016), *Family Interventions for Schizophrenia and the Psychoses: A Review*. Fam Process. 2016;55(3):460-82.
- Merikangas KR, Jin R, He J, Kessler RC, et al (2011), *Prevalence and Correlates of Bipolar Spectrum Disorder in the World Mental Health Survey Initiative*. Arch Gen Psychiatry. 2011;68(3):241-251.
- Morgan AJ, Reavley NJ, Ross A, et al (2018), *Interventions to reduce stigma towards people with severe mental illness: Systematic review and meta-analysis*. J Psychiatr Res. 2018;103:120-133.
- Mosalski S (2019), *TicToc (Timely inpatient care co-ordination and transfer of care): Has time run out?* St Vincent's Hospital, Sydney, research report, February 2019.
- Mitchell PB, Johnston AK, Frankland A, et al (2013), *Bipolar disorder in a national survey using the World Mental Health Version of the Composite International Diagnostic Interview: the impact of differing diagnostic algorithms*. Acta Psychiatr Scand. 2013;127(5):381-93.
- Murru A, Primavera D, Oliva M, Meloni ML, et al (2015), *The role of comorbidities in duration of untreated illness for bipolar spectrum disorders*. J Affect Disord. 2015;188:319-23.
- National Mental Health Commission (2014), *The National Review of Mental Health Programmes and Services: Volume 1 – Strategic Directions, Practical Solutions 1-2 years*. ISBN 978-0-9874449-6-7.

- Ng SM, Yeung CH, Gao S (2019), *A concise self-report scale can identify high expressed emotions and predict higher relapse risk in schizophrenia*. Compr Psychiatry. 2019;89:1-6.
- NSW Mental Health Commission (2014), *Living Well: A Strategic Plan for Mental Health in NSW*. ISBN 978-0-9923065-4-0.
- O'Brien A, Ashby GA, White S, Crame J (2015), *What do general psychiatrists do? A question posed to medical students and the general population*. J Ment Health. 2015;24(3):126-8.
- O'Brien D, Harvey K, Howse J, et al (2016), *Barriers to managing child and adolescent mental health problems: a systematic review of primary care practitioners' perceptions*. Br J Gen Pract. 2016;66(651):e693-707.
- Parker GB (2011), *Bipolar II disorder--diagnostic and management lessons for health practitioners from a coronial inquest*. Med J Aust. 2011;195(2):81-3.
- Productivity Commission (2019), *Mental Health*. Draft Report, October 2019.
- Renes JW, Regeer EJ, Hoogendoorn AW, et al (2018), *A nationwide study on concordance with multimodal treatment guidelines in bipolar disorder*. Int J Bipolar Disord. 2018;6(1):22.
- Reinares M, Bonnín CM, Hidalgo-Mazzei D, Sánchez-Moreno J, Colom F, Vieta E (2016), *The role of family interventions in bipolar disorder: A systematic review*. Clin Psychol Rev. 2016;43:47-57.
- Rich JV (2015), *Perceptions of Family Medicine Residents on the Role of Clinical Uncertainty in Learning to Become Competent Family Physicians*. Master of Education thesis, Queen's University, August 2015.
- Rienecke RD, Accurso EC, Lock J, Le Grange D (2016), *Expressed Emotion, Family Functioning, and Treatment Outcome for Adolescents with Anorexia Nervosa*. Eur Eat Disord Rev. 2016;24(1):43-51.
- Rothlind E, Fors U, Salminen H, et al (2020), *The Informal Curriculum of Family Medicine – what does it entail and how is it taught to residents? A systematic review*. BMC Fam Pract. 2020;preprint;v1. 14 November 2019.
- Sala R, Goldstein BI, Wang S, Blanco C (2014), *Childhood maltreatment and the course of bipolar disorders among adults: epidemiologic evidence of dose-response effects*. J Affect Disord. 2014;165:74-80.
- Scheele CE, Vrangbæk K (2016), *Co-location as a Driver for Cross-Sectoral Collaboration with General Practitioners as Coordinators: The Case of a Danish Municipal Health Centre*. Int J Integr Care. 2016;16(4):15.
- Scott J, Colom F, Pope M, Reinares M, Vieta E (2012), *The prognostic role of perceived criticism, medication adherence and family knowledge in bipolar disorders*. J Affect Disord. 2012;142(1-3):72-6.
- Seierstad TG, Brekke M, Toftemo I, Haavet OR (2017), *GPs' and child and adolescent psychiatry specialists' experiences of joint consultations in the GP's office: a qualitative study*. BMC Res Notes. 2017;10(1):458.
- Stiles BM, Fish AF, Vandermause R, Malik AM (2018), *The Compelling and Persistent Problem of Bipolar Disorder Disguised as Major Depression Disorder: An Integrative Review*. J Am Psychiatr Nurses Assoc. 2018;24(5):415-425.

- Stubbs B, Vancampfort D, Solmi M, et al (2016), *How common is bipolar disorder in general primary care attendees? A systematic review and meta-analysis investigating prevalence determined according to structured clinical assessments*. Aust N Z J Psychiatry. 2016;50(7):631-9.
- Subotic-Kerry M, King C, O'Moore K, et al (2018), *General Practitioners' Attitudes Toward a Web-Based Mental Health Service for Adolescents: Implications for Service Design and Delivery*. JMIR Hum Factors. 2018;5(1):e12.
- Tatlow-Golden M, Prihodova L, Gavin B, et al (2016), *What do general practitioners know about ADHD? Attitudes and knowledge among first-contact gatekeepers: systematic narrative review*. BMC Fam Pract. 2016;17(1):129.
- Tondo L, Pompili M, Forte A, Baldessarini RJ (2016), *Suicide attempts in bipolar disorders:* comprehensive review of 101 reports. Acta Psychiatr Scand. 2016;133(3):174-86.
- Treasure J, Nazar BP (2016), *Interventions for the Carers of Patients with Eating Disorders*. Curr Psychiatry Rep. 2016;18(2):16.
- Turner S, Mota N, Bolton J, Sareen J (2018), *Self-medication with alcohol or drugs for mood and anxiety disorders: A narrative review of the epidemiological literature*. Depress Anxiety. 2018;35(9):851-860.
- Wood E, Ohlsen S, Ricketts T (2017), *What are the barriers and facilitators to implementing Collaborative Care for depression? A systematic review*. J Affect Disord. 2017;214:26-43.
- Yen S, Stout R, Hower H, et al (2016), *The influence of comorbid disorders on the episodicity of bipolar disorder in youth*. Acta Psychiatr Scand. 2016;133(4):324-34.
- Zavala AM, Day GE, Plummer D, Bamford-Wade A (2018), *Decision-making under pressure: medical errors in uncertain and dynamic environments*. Aust Health Rev. 2018;42(4):395-402.