Investing in youth mental health is a best buy

Patrick D McGorry, Rosemary Purcell, Ian B Hickie and Anthony F Jorm

The logic and plan for achieving early intervention in youth mental health in Australia

"Mental illnesses are the chronic diseases of the young."[1]

Mental and substance use disorders are among the most important health issues facing Australians.[2,3] They are easily the key health issue for young people in their teenage years and early 20s and, if these disorders persist, the constraints, distress and disability they cause can last for decades. Epidemiological data indicate that 75% of people suffering from an adult-type psychiatric disorder have experienced its onset by 24 years of age,[4] with the onset for most of these disorders — notably mood, psychotic, personality, eating and substance use disorders — mainly falling into a relatively discrete time band from the early teens to the mid 20s, and reaching a peak in the early 20s.

Mental and substance use disorders in young people: high tide and rising?

In Australia, the prevalence of mental health problems among children aged 4–12 years lies between 7% and 14%, rises to 19% among adolescents aged 13–17 years,[5] and increases again to 27% among young adults aged 18–24.[6] Therefore, up to one in four young people in Australia are likely to be suffering from a mental health problem, most commonly substance misuse or dependency, depression or anxiety disorder, or combinations of these.[7] This is the highest prevalence and incidence for such disorders across the whole lifespan, and furthermore they capture the highest market share, with 55% of the burden of disease in the 15–24-years age group.[8] There is also some evidence that the prevalence may have risen in recent decades.[9]

Given the exquisite developmental sensitivity of this phase of life, where psychological, social and vocational pathways and independence are being laid down, it is not surprising that mental disorders, even relatively brief and milder ones, can derail and disable, seriously limiting or blocking potential. Associated with mental disorders among youth are high rates of enduring disability, including school failure, impaired or unstable employment, and poor family and social functioning, leading to spirals of dysfunction and disadvantage that are difficult to reverse.

Another important subgroup have disabling illnesses that developed in childhood, such as autism, attention deficit hyperactivity disorder, conduct disorder, or behavioural complications of intellectual disability. These may persist into adolescence and adulthood, where their initial effects are compounded.[10] Clearly, this group must be identified and provided with skilled and sustained intervention, beginning in childhood and extending for as long as necessary.

The influential report on the global burden of disease estimated the peak age for the maximum negative impact of a disabling illness, in social and economic terms, to be 22 years.[11] This is because society has invested heavily in young people to enable them to reach this age intact. If a disabling illness prevents them fulfilling their potential, and at the same time they may require long term care over many decades, this is a social and economic disaster. The importance of young people for society will increase with the ageing of the population. The Australian Treasury's *Intergenerational report* has pointed out that population ageing will lead to decreasing workforce participation and increasing government expenditure on income support.[12] Increasing the participation of younger people is important to ameliorate these trends. Mental disorders are an important factor in limiting economic and social participation, and it has been argued that improving mental health can reduce unemployment and welfare dependency.[13,14]

Mental health care systems are weakest where they need to be strongest

During the 1990s, federal, state and territory governments made progress in improving supports and services for people affected by mental disorders, but the reform process has stalled recently.[3] At the same time, expectations for better care were raised by increasing community awareness,[15-17] and by enhancements of care, particularly in general practice settings.[18-20] As a result of the morbidity peaking in the age range 12–25 years, and other sociological and cultural factors (including the adverse effects of co-occurrence of offending behaviour and substance misuse in this age group), youth mental health emerged as the most obvious area of failure. This is an international failure, which has recently also come to prominence in the United States, where the same challenges we have identified for Australia confront clinicians, researchers and service planners. Unmet need is the rule rather than the exception, and most responses to mental health problems occur across a diverse range of services.[21,22]

The community has clearly recognised the central role of early intervention strategies for young people with emergent mental disorders.[2,3] By contrast, state and territory governments around Australia have hitherto failed to acknowledge youth mental health as a discrete, unified program area. Public mental health services in Australia continue to follow a traditional paediatric versus adult model of care — mirroring mainstream physical health care — despite a completely different pattern of peak onset and burden of disease. Adolescent mental health is typically embedded within child-oriented service settings and structures and is truncated in the mid to late teens, while adult mental health services are focused on late-stage disease in mid-life. Consequently, there is maximum weakness and discontinuity in the system just where it should be at its strongest.

Some will contend that mental health services for prepubertal children are also poorly structured and funded, and furthermore that many of the wellsprings and risk factors for the later surge in adolescent and adult-onset disorders operate earlier in childhood. Both of these perspectives are valid, although the second is part of the prevention agenda, and the full force of morbidity flowing from childhood risk factors (and which requires a treatment response) appears after a latent period in most cases. Furthermore, such arguments in no way weaken the imperative to address the most glaring omission in public mental health policy — the lack of a specialised stream of care focused on early intervention in youth

mental health. We contend it represents the best value for money for new investment in the mental health arena.

Services for young people affected by mental health and related substance use disorders tend to be threadbare and split across multiple levels of government, multiple program areas, and myriad cash-strapped service providers. In addition, spending in the area remains poor, and service access and tenure are actively withheld in most specialist mental health and substance misuse service systems until high levels of risk or danger are reached, or severe illness, sustained disability and chronicity are entrenched. While primary care services encounter many young people with mental disorders, the detection and treatment rates are extremely low and poorly supported by specialist services.[23,24]

The consequences of this structural weakness in both primary care and specialist services, as well as the under-resourcing and poor coordination, are enormous. Just when mental health services are most needed by young people and their families, they are often inaccessible or unacceptable in design, style and quality. Numerous young people with distressing and disabling mental health difficulties struggle to find age-appropriate assistance (see Rickwood et al, *page S35* and Hickie et al, *page S47*). Young people with moderately severe non-psychotic disorders (eg, depression, anxiety disorders and personality disorders), and those with comorbid substance use and mental health issues, are particularly vulnerable. Without access to appropriate treatment, many young people present in repeated crisis to overstretched hospital emergency departments, or their parents and carers are left to pick up the pieces (see Leggatt, *page S61*). For many of these young people, if they survive (and many do not), their difficulties eventually become chronic and disabling. Urgent action is required to address this crisis, and a clearer and more substantial focus on youth mental health is needed.

Responding to genuine unmet need: innovation, reform and investment

Early, effective intervention, targeting young people aged 12–25 years, is a community priority,[3] and is required if we wish to reduce the burden of disease created by these disorders. A strong focus on young people's mental health has the capacity to generate greater personal, social and economic benefits than intervention at any other time in the lifespan and is therefore one of the "best buys" for future reforms.

We propose that four service levels are required to fully manage mental illness among young people. These levels include:

- *Improving community capacity* to deal with mental health problems in young people through e-health, provision of information, first aid training and self-care initiatives (eg, see Burns et al [*page S31*] and Kelly et al [*page S26*]).
- *Primary care services* provided by general practitioners and other frontline service providers, such as school counsellors, community health workers, and non-government agency youth workers.
- *Enhanced primary care services* provided by GPs (ideally working in collaboration with specialist mental health service providers in co-located multidisciplinary service centres) as well as team-based "virtual" networks (see Hickie et al, *page S47*, and McGorry et al, *page S68*).
- *Specialist youth-specific (12–25 years) mental health services* providing comprehensive assessment, treatment and social and vocational recovery services (see McGorry, *page S53*).

Fortunately, some of these elements are already in place or actively being developed.

The National Youth Mental Health Foundation (*headspace*), focusing on 12–25 year olds, promises to be a significant advance (see McGorry et al, *page S68*). *headspace* is further developing partnerships between primary care and specialist mental health service providers, to create more comprehensive and integrated service platforms for young people with emerging mental health and related substance use disorders. The treatment needs of this group are too complex for primary care services alone, but not complex enough to warrant intervention from specialist mental health services.

However, growth and reform at the state-funded specialist mental health service level to mirror this community-based investment in youth mental health is an essential parallel process (see McGorry, *page S53*). The development of youth-specific specialist mental health services for young people aged 12–25 years is a vital pillar for the service system that would strengthen existing child and adolescent, adult and aged persons' services with a major new stream of care, and would provide access to integrated mental health, substance use, and vocational recovery supports and services.

Fears have been expressed that such new investment would somehow reduce or limit investment in mental health services for younger children. There is no reason to suppose that disinvestment would occur, and it is doubtful that anyone in child and adolescent psychiatry would seek to undermine efforts to enhance investment in adolescent mental health, a major part of their professional domain. It is quite respectable to make arguments in support of strengthening of services in this area too, and for prevention programs targeting key risk factors for later disorders, such as abuse and neglect. This should not be framed as an either–or argument. While priorities do need to be set, this should be done on the basis of the best available evidence and likely cost-effectiveness, rather than reactive counter-advocacy, based on the assumption of a zero sum game in mental health, with winners and losers.

Early intervention in youth mental health is a best buy

It is now accepted at both the state and federal level, as well as in the wider community, that much greater investment is required in mental health care in Australia (http://www.coag.gov.au). Such investment has been delayed, partly because of a lack of confidence that it would result in health gain. Since the early 1990s, it has been proposed that early case identification and intensive treatment of first episodes of illness constitute a core preventive strategy with an excellent chance of reducing prevalence, cost and morbidity by preventing progression of illness. Achieving this would also minimise the "collateral damage" to social, educational, and vocational functioning.[25] Evidence in support of this proposition has been building steadily through research into psychotic and severe mood disorders over the past decade.[26-28] This evidence now represents "proof of concept" and, while, so far, it is strongest for low-incidence conditions, the next phase needs to extend this focus to high-incidence conditions and embed the strategy into mental health strategies for the wider Australian community. The contributions to this Supplement describe the logic and plan for how this can be achieved in Australia.

Author details

Patrick D McGorry, MD, PhD, FRCP, FRANZCP, Professor of Youth Mental Health,[1] Executive Director[2]
Rosemary Purcell, MPsych, PhD, Senior Research Fellow,[2,3] Team Leader[4]
Ian B Hickie, MD, FRANZCP, Professor of Psychiatry, and Executive Director[5]
Anthony F Jorm, PhD, DSc, Professorial Fellow[2]
1 University of Melbourne, Melbourne, VIC.
2 ORYGEN Research Centre, University of Melbourne, Melbourne, VIC.
3 Department of Psychiatry, University of Melbourne, Melbourne, VIC.
4 Centre of Excellence, *headspace*: The National Youth Mental Health Foundation, Melbourne, VIC.
5 Brain and Mind Research Institute, University of Sydney, Sydney, NSW.
Correspondence: pmcgorry@unimelb.edu.au

References

1 Insel TR, Fenton WS. Psychiatric epidemiology: it's not just about counting anymore. *Arch Gen Psychiatry* 2005; 62: 590-592.
2 McGorry P. "Every me and every you": responding to the hidden challenge of mental illness in Australia. *Australas Psychiatry* 2005; 13: 3-15.
3 Hickie IB, Groom GL, McGorry PD, et al. Australian mental health reform: time for real outcomes. *Med J Aust* 2005; 182: 401-406.
4 Kessler R, Bergland P, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005; 62, 593-602.
5 Sawyer MG, Arney FM, Baghurst PA, et al. The mental health of young people in Australia. Canberra: Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged and Care, 2000.
6 Australian Bureau of Statistics. Mental health and wellbeing: profile of Adults, Australia. Canberra: ABS, 1997. (ABS Catalogue No. 4326.0.)
7 Australian Institute of Health and Welfare. Australia's young people: their health and wellbeing. Canberra: AIHW, 2003. (AIHW Catalogue No. PHE 50.) http://www.aihw.gov.au/publications/phe/ayp03/ayp03-c00.pdf (accessed Jun 2007).
8 Mathers C, Vos T, Stevenson C. The burden of disease and injury in Australia. Canberra: Australian Institute of Health and Welfare, 1999. http://www.aihw.gov.au/publications/index.cfm/title/5180 (accessed Aug 2007).
9 Rutter M, Smith DJ. Psychosocial disorders in young people, time trends and their causes. Chichester, UK: John Wiley & Sons, 1995.
10 Einfeld SL, Piccinin AM, Mackinnon A, et al. Psychopathology in young people with intellectual disability. *JAMA* 2006; 296: 1981-1989.
11 Murray CJL, Lopez AD. The global burden of disease. Geneva: World Health Organization, 1996.
12 Australian Treasury. Intergenerational Report 2002–03. Budget Paper No. 5. Canberra: Commonwealth of Australia, 2002. http://www.budget.gov.au/2002-03/bp5/html/01_BP5Prelim.html (accessed Jun 2007).
13 Hickie IB, Groom G, Davenport T. Investing in Australia's future: the personal, social and economic benefits of good mental health. Canberra: Mental Health Council of Australia, 2004.
14 Butterworth P, Berry H. Addressing mental health problems as a strategy to promote employment: an overview of interventions and approaches. *Aust Soc Policy* 2004: 19-49. http://www.facsia.gov.au/research/austsocpolicy_2004/article2.htm (accessed Jun 2007).
15 Hickie IB. Preventing depression: a challenge for the Australian community. *Med J Aust* 2002; 177 (7 Suppl): S85-S86.
16 Highet NJ, Hickie IB, Davenport TA. Monitoring awareness of and attitudes to depression in Australia. *Med J Aust* 2002; 176 (10 Suppl): S63-S68.
17 Jorm AF, Christensen H, Griffiths KM. Changes in depression awareness and attitudes in Australia: the impact of *beyondblue*: the national depression initiative. *Aust N Z J Psychiatry* 2006; 40: 42-46.
18 Hickie IB. Reducing the burden of depression: are we making progress in Australia? *Med J Aust* 2004; 181 (7 Suppl): S4-S5.
19 Hickie IB, Pirkis JE, Blashki GA, et al. General practitioners' response to depression and anxiety in the Australian community: a preliminary analysis. *Med J Aust* 2004; 181 (7 Suppl): S15-S20.
20 Hickie IB, Davenport TA, Scott EM, et al. Unmet need for recognition of common mental disorders in Australian general practice. *Med J Aust* 2001; 175 (2 Suppl): S18-S24.
21 Costello EJ, Copeland W, Cowell A, Keeler G. Service costs of caring for adolescents with mental illness in a rural community, 1993–2000. *Am J Psychiatry* 2007; 164: 36-42.
22 Wang PS, Sherrill J, Vitiello B. Unmet need for services and interventions among adolescents with mental disorders. *Am J Psychiatry* 2007; 164: 1-3.
23 Hickie IB, Davenport TA, Naismith SL, et al. Treatment of common mental disorders in Australian general practice. *Med J Aust* 2001: 175 (2 Suppl) S25-S30.
24 Issakidis C, Andrews G. Who treats whom? An application of the Pathways to Care model in Australia. *Aust N Z J Psychiatry* 2006; 40: 74-86.
25 Patel V, Flisher AJ, Hetrick SE, McGorry PD. Mental health of young people: a global public-health challenge. *Lancet* 2007; 369: 1302-1313.
26 Mrazek PJ, Haggerty RJ, editors. Reducing risks for mental disorders: frontiers for preventive intervention research. Washington: National Academy Press, 1994.
27 Killackey E, Yung A. Effectiveness of early intervention in psychosis. *Curr Opin Psychiatry* 2007; 20: 121-125.
28 Hafner H, Maurer K. Early detection of schizophrenia: current evidence and future perspectives. *World Psychiatry* 2006; 5: 130-138. ❑