

Special article

Designing youth mental health services for the 21st century: examples from Australia, Ireland and the UK

Patrick McGorry, Tony Bates and Max Birchwood

Summary

Despite the evidence showing that young people aged 12–25 years have the highest incidence and prevalence of mental illness across the lifespan, and bear a disproportionate share of the burden of disease associated with mental disorder, their access to mental health services is the poorest of all age groups. A major factor contributing to this poor access is the current design of our mental healthcare system, which is manifestly inadequate for the unique developmental and cultural needs of our young people. If we are to reduce the impact of mental disorder on this most vulnerable population

group, transformational change and service redesign is necessary. Here, we present three recent and rapidly evolving service structures from Australia, Ireland and the UK that have each worked within their respective healthcare contexts to reorient existing services to provide youth-specific, evidence-based mental healthcare that is both accessible and acceptable to young people.

Declaration of interest

None

National mental health policies in the new century will increasingly seek to explore preventive strategies and better reflect the pattern of mental ill health across the lifespan. This pattern is essentially the mirror image of that seen in physical illness, with the peak age at onset and need for initial care for mental disorders occurring in adolescence and early adulthood. 1,2 Australian National Mental Health Survey data have revealed that young people not only have the highest incidence and prevalence of mental illness across the lifespan, they also manifest the worst service access of any age group, with only 21.8% of Australians between 16 and 24 years of age with a diagnosable mental disorder accessing professional help.3 Alarmingly, only 13% of young men with a mental disorder accessed mental healthcare.³ Recent data from New Zealand and the USA reveal rates of 50% incidence between ages 12 and 25 years and 40% 12-month prevalence between ages 13 and 18 years. 4,5 Much of this mental ill health is persistent and causes serious functional impairment which has lasting impacts. Hence, although it might be tempting to dismiss this phenomenon as 'overdiagnosis', the facts do not support this. An equally important influence on service culture and structure has been the changing experience of the developmental transition from childhood to adulthood in the 21st century.⁶ Emerging adulthood is now a more prolonged and unstable developmental stage with novel aspects, yet with increased risks of mental ill health.⁶ The world has changed dramatically in recent decades and young people are not only in the vanguard of these changes, but are also bearing the burden associated with them.7

Our existing services are manifestly not providing access or appropriate care. Both child and adolescent mental health services (CAMHS) and adult mental health services (AMHS) provide delayed and heavily restricted access to services for a small subgroup of people with severe and complex disorder, whose developmental and family needs are not met in a holistic manner across the age range, with the artificial boundary at age 18 years a major barrier. The challenge we face is therefore a matter of scale, scope, culture and expertise. Redesign and transformational change are needed. Although the status quo is a tenacious opponent, we should also recognise that our service models have shallow roots. Current AMHS are recent successors to the purely bed-based 19th-century asylum system, and clinically continue

to adopt a similar focus in most jurisdictions. The CAMHS system is essentially a recent extension of a quite different tradition, the child guidance model. Admirably, it has sought to fill a huge gap and extend coverage through adolescence to the lower reaches of the adult system. Despite the best will in the world, this mimicry of the paediatric/adult divide of general healthcare has not been successful, as the work of Singh et al has illustrated in the UK.8 There is not only a clash of history and culture, but practically speaking a yawning gap into which many young people and their families are falling every day around the world. The current system is weakest where it needs to be strongest. This is not a situation where incremental change is likely to work, because the fundamentals of any new system need to be right. Although the existing service structures are fundamentally flawed, the challenge of designing stigma-free services with a better match to the emerging needs of young people should not be underestimated. We describe here three recently evolving services from Australia, Ireland and the UK that have attempted, in their different healthcare contexts, to redefine service structures for young people up to 25 years old in the light of this emerging evidence.

Innovation in youth mental health

It is possible to describe a set of key features, principles and targets for the redesign of services to better meet the needs of young people; these may be summarised as follows:

- (a) youth participation at all levels, essential to create youth-friendly, stigma-free cultures of care;
- (b) a holistic, preventive and optimistic stance with sequential/ stepwise care governed by risk/benefit and shared decisionmaking principles;
- (c) early intervention, social inclusion and vocational outcomes as core targets;
- (d) care reflecting both the epidemiology of mental ill health in young people and the new developmental culture of emerging adulthood in the early 21st century;
- (e) elimination of discontinuities at peak periods of need for care and developmental transition;

(f) positive and seamless linkages with services for younger children and older adults.

The service models described here all seek to address some or all of these issues. It is important to note that each of these descriptions can be assigned to one of two tiers: an enhanced primary care level, which has extensions into many community domains; and a specialist youth mental health level, which enables acute, complex and potentially more severe and enduring forms of mental ill health to be responded to in a timely and developmentally appropriate manner.

Australia

Australia is experiencing a new wave of mental health reform within which transformational change in youth mental health is one of the key growth points. Reform is occurring at both the primary and specialist care levels within the complexities of the federal/state governmental system. The Royal Australian and New Zealand College of Psychiatrists has established a special interest group in youth mental health to create new professional interest, knowledge and skills in this emergent field and to help meet workforce needs within the expanding service system described below.

Headspace

Headspace, the National Youth Mental Health Foundation (www.headspace.org.au/), is an enhanced primary care model for youth mental healthcare in Australia. It was established by the Australian federal government in 2006, with the mission to promote and support early intervention for young people aged 12-25 years with mental ill health. The major part of its mandate was to establish youth-friendly, highly accessible centres that target young people's core health needs by providing a multidisciplinary enhanced primary care structure or 'one-stop shop', with close links to locally available specialist services and schools and many other community-based organisations. These centres are not designed to substitute for existing primary care services, but rather to complement them by encouraging young people to access an enhanced form of primary care as early as possible. The provision of a youth-friendly environment is vital as this is rarely available in standard primary care or the specialist mental health systems, and provides a soft entry point that is more appealing and effective in attracting distressed or struggling young people into the service without labelling or prematurely medicalising the problem.

Consulting for physical health problems is an important part of the Headspace mandate. This is because the physical health services provide a stigma-free access point to the scheme for young people, as well as continuity of care for their mental health problems. It also goes some way towards addressing the comorbidity of physical and mental health problems. The evaluation study of Headspace revealed that the physical health services were popular with the young people who used the service, 10 and that 62% of the young people surveyed as part of the in-depth evaluation process of the study reported improved physical health since using the service. Furthermore, both clinicians and young people reported that it was extremely useful to have medical and counselling services co-located as this not only encouraged young people to seek help, but also increased the likelihood that they would follow the medical advice that they were given. Young people said they would be more likely to take advice from Headspace clinicians than from other doctors, and that they felt more confident about advice when it came from a number of different, trusted practitioners - from both a general practitioner (GP) and a psychologist, for example.

The model is a universal one, congruent with Australia's universal system of healthcare; however, many Headspace centres

have been located in regions with relatively poor access to standard mental health services, particularly in regional and rural parts of Australia and outer metropolitan regions with high need and poor access. The overarching aims of each centre are to promote and support early intervention for mental and substance use disorders through four core service streams: mental health, drug and alcohol services, primary care (general health) and vocational/educational assistance. To achieve this type of integrated care, each Headspace centre is led by a key agency (typically, but not always, a primary healthcare divisional structure that coordinates primary care in that region) on behalf of a local consortium of organisations who take responsibility for the coordination and delivery of the four core streams within a 'one-stop shop' or single location. This approach is designed to facilitate the coming together of existing local services that are already working well within the region, to create a new, highly visible portal and platform for the care of young people. In addition to the provision of services within the four core streams, each Headspace centre also delivers local community awareness campaigns to enhance young people's help-seeking behaviour, the capacity of families and local service providers to identify emerging mental health concerns early and to strengthen referral pathways into the service. Headspace has also developed internet-based programmes to provide online support and interventions and school-based intervention programmes across the country.

Four Headspace sites have strong links with specialised youth mental health services; Campbellfield and central Sydney with the Brain and Mind Research Institute (BMRI) in Sydney, and western and northern Melbourne with Orygen Youth Health in Melbourne. Because Orygen Youth Health and the BMRI are major mental health research institutes, these links will provide an unparalled opportunity for the conduct of clinical research to improve the evidence base for the utilisation of treatments specific to the stage and severity of emerging mental disorders in young people, as well as the trialling of methods that foster efficient take-up of evidence-based treatments and models of care into clinical practice.

Headspace has been evaluated and the results, although preliminary, were very positive. Ninety-three per cent of young people were satisfied with the care they received, the engagement of young men was just as successful as that of young women (a major change) and access has been provided so far to over 50 000 young Australians through the 30 centres that have been operating in the first wave of this national programme. 10 These sites are uniformly stigma-free and strongly supported by their local communities. The bulk of the young people using Headspace services are experiencing moderate levels of mental ill health; however, at most of the sites there is also a substantial subset of young people with more complex, severe and enduring problems who currently are unable to gain access to the traditional child and adult mental health systems. 11 Within the context of a 10-year reform programme, the federal government has allocated an additional AUD\$197 million of funding to strengthen the capacity of the existing sites and to increase the number of Headspace sites to 90 nationally by 2015. The programme has bipartisan political support, and we are now witnessing for the first time communities across Australia lobbying and competing for a Headspace service to be established locally.

Orygen Youth Health

Headspace addresses early intervention, particularly for common mental health problems, but a second tier or back-up system is necessary for young people with complex presentations or more severe conditions, who typically require intensive, specialised treatment and a longer tenure of care. Orygen Youth Health (http://oyh.org.au) was established in 2002, having evolved during the middle to late 1990s from the Early Psychosis Prevention and Intervention Centre (EPPIC) model to deliver specialised early intervention to a broader range of diagnostic groups; 12,13 it is Australia's largest youth-specific mental health organisation and comprises an integrated research and clinical programme. 12 Its clinical programme provides a range of community-based and acute services for over 700 young people per annum aged 15–25 years living within a catchment area of approximately 1 million people in north-western metropolitan Melbourne.

Orygen Youth Health focuses on early intervention for psychosis, mood disorders and borderline personality disorder in young people, acknowledging the complexities of service provision in an age group where comorbidity is the norm, and that linkages with other mental health and general support agencies are essential in ensuring quality service provision. The 'front end' of its clinical programme is the the youth access team, a 24 h, 7 days per week triage, assessment and crisis response service, which also provides community- and home-based services to those who require more intensive treatment than can be offered by their case manager alone. Once accepted into the service, a young person is managed by the continuing care team, which is structured around four specialised clinics: EPPIC, for young people who are experiencing a first episode of psychosis (including type 1 bipolar disorder); the Personal Assessment and Crisis Evaluation (PACE) clinic, which accepts young people who are assessed as being at ultra-high risk of developing a psychotic disorder; the Youth Mood Clinic, for young people experiencing a range of non-psychotic disorders, predominantly major depression and type 2 bipolar disorder; and Helping Young People Early (HYPE), for young people with emerging borderline personality disorder. These clinics each offer a 2-year period of care and provide a full range of specialised interventions, including case management, individual support and therapy, and consultation-liaison, and work closely with Orygen's psychosocial recovery programme to support the young person's social and vocational recovery and return to optimal functioning as soon as possible. Particularly critical in this context are vocational interventions and groups that focus on assisting clients with school, study and work goals and functioning. Orygen Youth Health also has a 16-bed in-patient unit specifically for young people which focuses on acute care, emphasising brief admission in order to prepare the young person for community support provided by the youth access team or case manager.

National scaling-up of the EPPIC model

Early intervention for psychosis, largely focused on young people, commenced with the original EPPIC model in 1992 in Melbourne. Although early intervention models have been developed and scaled up in hundreds of locations internationally during the past two decades, Australia had until now largely failed to carry out this reform systematically. In the context of the new national reforms, and backed by AUD\$222 million of federal funding with matching state government funding, from early 2012, a national system of 16 high-fidelity early psychosis services will be developed across the nation, a national partnership between federal and state governments which by 2015 will see many more Australian communities at last gaining access to one of the most evidence-based and popularly supported reforms in mental healthcare. Focused on those aged 15–24 years and linked where possible to the expanding Headspace network, these early psychosis services will provide much-needed back-up to many

of the young people in Headspace who need a more specialised service with a youth-friendly culture. This reform will also build a national base for potential future extension of the early intervention strategies to non-psychotic disorders in young people along the lines of the Orygen model described earlier.

Ireland

High rates of suicide and self-harm have created a sense of alarm in Ireland and a deep concern about the mental health and well-being of Irish young people. Prevalence studies have confirmed high rates of mental health problems among young people, 14-16 and an escalating drumbeat of media stories about suicide, antisocial behaviour, school failure and substance misuse has reinforced the perception of a generation in crisis. It was in this context that Headstrong, the National Centre for Youth Mental Health, was founded as an autonomous Irish charitable organisation with the intent of promoting change through a public-private partnership. This occurred in the context of a national desire to see widespread mental health reform occur as captured in the national mental health policy framework A Vision for Change. 17 Pathways to care for young people were non-existent or dysfunctional; there was no coherent continuum of support, providers tended to operate within silos and did not communicate or collaborate, and narrow funding streams and territoriality resulted in rigidity in the way people thought about and responded to young people, while young people felt they had no voice.

Jigsaw

The Jigsaw model of service delivery was Headstrong's response to the challenge of transforming the way young people in Ireland access support and changing the way Ireland thinks about young people. The model is based on certain key ideas and assumptions. The existing community-based system of specialist mental health services was believed to be inadequate; however, simply adding more positions, services and programmes would not necessarily improve the current system. Headstrong felt that systemic and cultural transformation was needed. To achieve this, young people needed to be actively engaged in the design, implementation and review of programmes to ensure that these programmes would be accessible and non-stigmatising for young people, and that partnerships among services engaged in promoting positive youth mental health would be fostered.

Guided by the phrase 'somewhere to turn to, someone to talk to,18 the Jigsaw model aimed to strengthen a community's capacity to support its young people. Headstrong engaged strongly and consistently with a number of communities across the country to gauge and enhance the level of commitment to tackle the challenge of youth mental health. This meant providing avenues for the voices of local young people to be heard, engaging all relevant stakeholders, including key statutory, community and voluntary agencies (e.g. CAMHS, AMHS, primary care, youth sector services, education and local development groups), rigorous planning processes, and training and community awareness activities. This was a successful strategy that generated strong local support for the next step that would require the re-engineering of services, new access points and establishment of new partnerships. As in Australia, high-level political support has been crucial, bipartisan and strong, and both the President and the Taoiseach have been directly involved in these reforms.

Jigsaw demonstration sites

Five Irish communities were selected as Jigsaw demonstration sites: Counties Galway, Kerry and Meath, and the towns of Roscommon and Ballymun, the last a disadvantaged neighbourhood of north Dublin. The intention was for these sites to implement transformation strategies with fidelity, serve as learning communities for ongoing development, validate the Jigsaw model and become centres of excellence for the remaining communities in Ireland. As of November 2011 a total of 2079 young people had been seen on an individual basis by the three fully operational Jigsaw sites: Galway, Ballymun and Kerry. The data demonstrate a wide diversity of access pathways, most commonly self- and parent referral. Many referrals came from secondary schools, social work services, youth programmes, adult mental health, general practitioners and peers. The majority of Jigsaw support recipients were in the 15–18 year age range, but the programme has also engaged a significant number of emerging adults in the 19–25 year age range.

The most common presenting issues for young people are anger, stress, tension, low self-worth, family problems and alcohol use. The resultant goal plans cover a wide range of areas, but the most common focus is on emotional, cognitive and behavioural self-regulation, as well as substance use, learning and family issues. To date, interventions related to peer relationships, help-seeking, daily living skills, physical health and emotional regulation have the highest rates of goal attainment. In contrast, lower levels of goal attainment are seen in areas such as housing, employment, problem-solving and conflict management. Approximately 5–10% of engaged young people have needs requiring higher-level mental health specialty services.

Despite the tight fiscal environment in Ireland, funding has been committed for the expansion of the number of sites to 12, and the Health Service Executive is becoming more strongly involved in the reform process. An Irish special interest group in youth mental health has been in operation for over 2 years and has held one highly successful national youth mental health conference.

England

Birmingham is the UK's second largest city with a population of 1.2 million; it is often characterised as the 'youngest city in Europe', with a population slanted towards youth and ethnic diversity including large Black, Muslim and Sikh communities. The population is served by two mental health services: Birmingham and Solihull Mental Health Foundation Trust (BSMHFT), serving those aged 16 years and above, and the CAMHS, which is sited in the Birmingham Children's Hospital. The adult mental health service in BSMHFT acted as the crucible for the UK's National Framework for Mental Health, pioneering integrated community services including early intervention in psychosis, home treatment/crisis resolution and assertive outreach teams. ¹⁹

Youthspace

The BSMHFT created a youth services programme, Youthspace, to catalyse the development of youth-sensitive service provision to improve youth access and health outcomes. Youthspace emerged following extensive consultation with young people and qualitative research about the experience of existing youth-focused care. The seeds of long-term social disability and exclusion among people with recurring mental health problems begin in adolescence (Jones, this supplement); improving life chances for young people is currently a political imperative in the UK, particularly for those who by age 25 years are not in employment, education or training. There are many non-health youth agencies in the UK working with socially marginalised young people who have considerable experience of this task; pre-eminent among these is the Prince's Trust (http://princes-trust.org.uk), which

provides numerous projects across the country to improve education, skill training and entrepreneurship for young people up to the age of 25 years. Youthspace has developed a strategic partnership with the Prince's Trust to jointly deliver mental health services to young people under 26 years old in Birmingham, placing social inclusion and employment at its heart.

Improving youth access. Access to services for the 16–25 year age group is being consolidated into two pathways. First, the adult community mental health teams are developing a youth access pathway – the youth access teams – which is being rolled out across Birmingham. These teams provide assessment and formulation to the referring GP within 1 week of referral; the default evidence-based intervention is brief cognitive—behavioural therapy, and any medication needs are delivered by the GP following advice from the team's consultant psychiatrist. Young people are seen in low-stigma channels of the young person's choice, including primary care or Prince's Trust facilities. In addition to symptomatic treatment, cases are screened for risk of emerging psychosis, bipolar disorder and eating and personality disorders within a staging framework (Lin et al, this supplement).²²

Improving transitions from CAMHS is the responsibility of a subteam that includes child psychiatrists and psychologists operating under an agreed transitions policy. This team is also responsible for managing the admissions of young people aged 16 or 17 years to non-adult units.

Intensive care streams. Those requiring further intensive interventions have access to the following specialised streams:

- (a) early intervention in psychosis five early intervention teams provide care from 14 years upwards (in conjunction with CAMHS up to age 16 years), a CAMHS-trained care coordinator manages all patients 14- to 16-years old in conjunction with the CAMHS teams;
- (b) attention-deficit hyperactivity disorder (ADHD) an ADHD service provides care to all young people as appropriate, transitioning from CAMHS;
- (c) eating disorders specialised in-patient and community services;
- (d) forensic YouthFIRST is a specialist community and in-patient forensic mental health service for young people at risk of offending or repeat offending.

Public youth mental health. In line with the UK mental health policy to promote prevention, early intervention and public wellbeing, ²³ Youthspace operates across Birmingham providing mental health awareness and interventions to promote resilience in young people through school-based interventions, together with targeted intervention with groups at high risk of lifelong mental health difficulty, particularly those in local authority care or young offenders. ²⁴ Internet and social media technologies are used to maximise reach to young people in the city. At the heart of this is the website www.youthspace.me, which has been designed by young people and gives advice, education and individualised assessment. Those accessing care are given personalised access to the website, which has online cognitive—behavioural therapy built in. A Facebook page and Twitter feed are available.

Evaluation. Youthspace has been subjected to a UK Health Innovation and Education Cluster (service innovation) evaluation comparing the programme's results with access and outcomes for young patients seen previously within CMHTs. Further research

into level of engagement/drop-out from services, time to assessment and clinical outcomes is in progress.

Discussion

The services described here have been built around a recognition of the major weakness of the health system for young people with mental ill health, consequent major unmet need, and a shared commitment to improve the accessibility, scale and cultural/ developmental appropriateness of mental health services to young people and families, and to reduce the need for harmful transitions at critical points in the young person's development. Jigsaw in Ireland is a public-private funded initiative providing additional early intervention support to young people and largely operates by coordinating existing provisions. Within mainstream healthcare, Headspace in Australia also addresses early intervention, particularly for common mental disorders, and is increasingly a fundamental building block of the primary care system and a new portal of access, information and multidisciplinary holistic care for young people. In Melbourne it is linked to a 'back-up' specialist system (Orygen Youth Health) for young people with complex presentations or more severe conditions, who typically require intensive, specialised treatment and a longer tenure of care. With the scaling-up of early psychosis services in Australia similar back-up will become increasingly available. If enhanced primary care youth health services were to develop in the UK then the early intervention in psychosis services could be accessed in this fashion by the subset of young people with psychosis who need them. Indeed, this would greatly aid the early detection of psychosis in young people, which is typically subject to long delays even after access to CAMHS and adult services. Youthspace in Birmingham occupies the other end of the continuum, where improved youth access and care are being undertaken through redesign of existing secondary healthcare provision and hence is similar to Orygen in focus. In Melbourne the integration of wider youth access via Headspace and specialised support through a dedicated youth mental health service provides the most complete picture of what a comprehensive service might look like in the future.

We believe that for transformational change to be successful, models like these need to be created, perfected and then scaled up within the context of national mental health policy frameworks that recognise the needs of people experiencing mental ill health across the lifespan, and that the provision of mental healthcare, notwithstanding the principle of integration with physical healthcare, must be correctly engineered, weighted and sequenced. The International Youth Mental Health Association has been established with leadership from seven countries to promote these objectives. One international youth mental health conference has been held in Melbourne in 2010, with a second to occur in March 2013 in Ireland.

Whenever new service frameworks appear they attract healthy debate and an appropriate demand for these alternatives to 'prove themselves'. This has been the story of early intervention in psychosis services; ²⁵ however, it has hardly been a level playing field. It is also incumbent on those supporting the status quo to do the same, yet this demand is seldom met. The service reconfigurations described here challenge us to ask whether the existing systems remain the best solution to the changing landscape of need and evidence in relation to the mental healthcare of young people in the 21st century. These systems have not been designed from first principles, but have evolved from different origins under a range of influences. With inertia and self-interest as powerful allies the status quo is hard to change.

It tends to privilege the needs of professionals and managers over those needing the service; hence its defenders are drawn primarily from the ranks of the former. The innovations described here seek to give voice to the latter, and we hope that service reform for young people continues to be informed by evidence, user preference and an increasing focus on preventive strategies. We recognise that the alternative models described here also have their weaknesses; in particular they include their own transition points. However, we contend that the evidence reviewed in this supplement convinces us that if we were to set about designing mental health services now we would not include a transition point at age 16-18 years; indeed, this is the point likely to do most harm. We believe that services for people up to 25 years old should be conceived as preventive in nature, interfacing with public mental health initiatives on the one hand and offering interventions that promote resilience as well as symptom reduction on the other. The aim of youth services should therefore be to reduce the need for transition into adult services. This reframing of the role of services, we believe, can galvanise the research and service commissioning agenda and decisively move services from symptom reduction and containment to prevention and social inclusion. We look forward to the debate.

Patrick McGorry, MD, PhD, FRCP, FRANZCP, Orygen Youth Health Research Centre, University of Melbourne, Australia; Tony Bates, PhD, Headstrong – The National Centre for Youth Mental Health, Dublin, Ireland; Max Birchwood, PhD, DSc, YouthSpace Programme, Birmingham and Solihull Mental Health and School of Psychology, University of Birmingham, UK

Correspondence: Professor Patrick McGorry, Director of Clinical Services, Orygen Youth Health Research Centre, University of Melbourne, Locked Bag 10, Parkville, Melbourne, Victoria 3052, Australia. Email: pmcgorry@unimelb.edu.au

Funding

P.McG. is supported by the Colonial Foundation, the Australian National Health and Medical Research Council, and the Australian and Victorian governments. T.B. is supported by the One Foundation and the Health Services Executive of the Government of Ireland. M.B. is part-funded by the National Institute for Health Research Birmingham and Black Country Collaboration for Leadership in Applied Health Research and Care.

References

- 1 Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005; 62: 593–602.
- 2 McGorry PD, Purcell R, Goldstone S, Amminger GP. Age of onset and timing of treatment for mental and substance use disorders: implications for preventive intervention strategies and models of care. *Curr Opin Psychiatry* 2011; 24: 301–6.
- 3 Australian Institute of Health and Welfare. Young Australians: Their Health and Well-Being 2007. AIHW, 2007.
- 4 Gibb SJ, Fergusson DM, Horwood LJ. Burden of psychiatric disorder in young adulthood and life outcomes at age 30. Br J Psychiatry 2010; 197: 122–7.
- 5 Kessler RC, Avenevoli S, Costello EJ, Georgiades K, Green JG, Gruber MJ, et al. Prevalence, persistence, and sociodemographic correlates of DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. Arch Gen Psychiatry 2012; 69: 372–80.
- 6 Arnett JJ. Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties. Oxford University Press, 2004.
- 7 Eckersley RM. Never Better or Getting Worse? The Health and Wellbeing of Young Australians. Australia21, 2008.
- 8 Singh SP, Paul M, Ford T, Kramer T, Weaver T, McLaren S, et al. Process, outcome and experience of transition from child to adult mental healthcare: multiperspective study. Br J Psychiatry 2010; 197: 305–12.
- 9 McGorry PD, Tanti C, Stokes R, Hickie IB, Carnell K, Littlefield LK, et al. Headspace: Australia's National Youth Mental Health Foundation – where young minds come first. Med J Australia 2007; 187 (suppl 7): s68–70.
- 10 Muir K, Powell A, Patulny R, Flaxman S, McDermott S, Oprea I, et al. Independent Evaluation of headspace: the National Youth Mental Health

- Foundation. Social Policy Research Centre, University of New South Wales, 2009.
- 11 Scott EM, Hermens DF, Glozier N, Naismith SL, Guastella AJ, Hickie IB. Targeted primary care-based mental health services for young Australians. Med J Aust 2012; 196: 136–40.
- 12 Purcell R, Goldstone S, Moran J, Albiston D, Edwards J, Pennell K, et al. Towards a 21st century approach to youth mental health care: some Australian initiatives. Int J Ment Health 2011; 40: 72–88.
- 13 McGorry PD, Edwards J, Mihalopoulos C, Harrigan SM, Jackson HJ. EPPIC: an evolving system of early detection and optimal management. Schizophr Bull 1996: 22: 305–26.
- 14 Lynch F, Mills C, Daly I, Fitzpatrick C. Challenging times: a study to detect Irish adolescents at risk of psychiatric disorders and suicidal ideation. J Adolesc 2004; 27: 441–51.
- 15 Lynch F, Mills C, Daly I, Fitzpatrick C. Challenging times: prevalence of psychiatric disorders and suicidal behaviours in Irish adolescents. *J Adolesc* 2006; 29: 555–73.
- 16 Martin M, Carr A, Burke L, Carroll L, Byrne S. *The Clonmel Project: Mental Health Service Needs of Children and Adolescents in the South East of Ireland*. Health Service Executive Clonmel, 2006.
- 17 Expert Group on Mental Health Policy. A Vision for Change: Report of the Expert Group on Mental Health Policy. Government of Ireland, 2006.

- 18 Bates T, Illback R, Scanlan F, Carroll L. Somewhere To Turn To, Someone To Talk To. Headstrong, National Centre for Youth Mental Health, 2009.
- 19 Joseph R, Birchwood M. The national policy reforms for mental health services and the story of early intervention services in the United Kingdom. J Psychiatry Neurosci 2005; 30: 362–5.
- 20 Lester H, Birchwood M, Bryan S, England E, Rogers H, Sirvastava N. Development and implementation of early intervention services for young people with psychosis: case study. Br J Psychiatry 2009; 194: 446–50.
- 21 Jones PB. Adult mental health disorders and age at onset. *Br J Psychiatry* 2013; 202 (suppl 54): s5–10.
- 22 Lin A, Reniers RLEP, Wood SJ. Clinical staging in severe mental disorder: evidence from neurocognition and neuroimaging. Br J Psychiatry 2013; 202 (Suppl 54): s11–7.
- 23 Department of Health Division of Mental Health. No Health Without Mental Health: A Cross-Government Mental Health Outcomes Strategy for People of All Ages. UK Department of Health, 2011.
- 24 Department of Health Division of Mental Health. *Confident Communities, Brighter Futures: A Framework for Developing Well-being*. UK Department of Health, 2010.
- 25 McGorry P, Johanessen JO, Lewis S, Birchwood M, Malla A, Nordentoft M, et al. Early intervention in psychosis: keeping faith with evidence-based health care. *Psychol Med* 2010; 40: 399–404.