Designing and scaling up integrated youth mental health care

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Mental ill-health represents the main threat to the health, survival and future potential of young people around the world. There are indications that this is a rising tide of vulnerability and need for care, a trend that has been augmented by the COVID-19 pandemic. It represents a global public health crisis, which not only demands a deep and sophisticated understanding of possible targets for prevention, but also urgent reform and investment in the provision of developmentally appropriate clinical care. Despite having the greatest level of need, and potential to benefit, adolescents and emerging adults have the worst access to timely and quality mental health care. How is this global crisis to be addressed? Since the start of the century, a range of co-designed youth mental health strategies and innovations have emerged. These range from digital platforms, through to new models of primary care to new services for potentially severe mental illness, which must be locally adapted according to the availability of resources, workforce, cultural factors and health financing patterns. The fulcrum of this progress is the advent of broad-spectrum, integrated primary youth mental health care services. They represent a blueprint and beach-head for an overdue global system reform. While resources will vary across settings, the mental health needs of young people are largely universal, and underpin a set of fundamental principles and design features. These include establishing an accessible, "soft entry" youth primary care platform with digital support, where young people are valued and essential partners in the design, operation, management and evaluation of the service. Global progress achieved to date in implementing integrated youth mental health care has highlighted that these services are being accessed by young people with genuine and substantial mental health needs, that they are benefiting from them, and that both these young people and their families are highly satisfied with the services they receive. However, we are still at base camp and these primary care platforms need to be scaled up across the globe, complemented by prevention, digital platforms and, crucially, more specialized care for complex and persistent conditions, aligned to this transitional age range (from approximately 12 to 25 years). The rising tide of mental ill-health in young people globally demands that this focus be elevated to a top priority in global health.

Key words: Youth mental health, integrated mental health care, primary care platforms, global mental health, early intervention, prevention, digital platforms

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People aged 10-24 years make up a quarter of the world's population[1]. Mental ill-health represents the number one threat to the health, well-being and productivity of these people, with 50% of mental disorders first emerging before 15 years of age and 75% by 25[2]. Mental disorders are extremely common in young people, with more than 50% impacted by the age of 25[3-5].

This landscape appears to be changing for the worse. Young people have experienced disproportionately worse mental health outcomes since the start of the COVID-19 pandemic[6], with 74% reporting that their mental health has worsened during this period[7]. Well before the pandemic, substantial evidence indicated that young people were facing a rising tide of mental ill-health, including anxiety, depressive symptoms, psychological distress and suicide[8-12].

Mental ill-health accounts for a staggering 45% of the overall burden of disease in those aged 10-24 years[13] and, through suicide, is the second most common cause of death[14]. The consequences of this are enormous, affecting young people, their families and community, as well as the economy at a local, national and global level.

Adolescence and the transition to adulthood is a dynamic and developmentally sensitive period. Mental ill-health during this life stage disrupts a range of milestones, including identity and relationship formation, educational and vocational attainment, financial independence, and achieving autonomy.

Key demographic changes have transformed this threat into what has been termed a "perfect storm"[15]. Although childhood mortality has fallen dramatically over the past century, the birth rate is dropping and the human lifespan is lengthening. This increases greatly the dependence of society on the health and productivity of young people. We simply cannot afford the loss of productivity wrought by preventable, untreated or poorly treated mental ill-health in young people. More than ever, we need to prevent or reduce premature death and disability in young people to enable them to shoulder the burden of the dependent older population.

Furthermore, because mental ill-health in young people is a potent yet largely ignored risk factor for age-related physical illnesses later in life[16], effective treatment of mental ill-health in youth will help to reduce the total burden of disease in older people. Responding effectively to this "perfect storm" will deliver enormous benefits not only to young people but to people across the lifespan and the whole of society.

THE DEVELOPMENTAL CHALLENGE

The journey from childhood to mature adulthood is now more complex and protracted than ever before, as a result of the changing social construction of the transition, the extension of the lifespan, the later age of marriage and childbirth, and a raft of other destabilizing social, technological and economic changes in society, including globalization, rising inequality and climate change[17,18]. All this has introduced new features into the landscape of the developmental process, which have been captured under the rubric "emerging adulthood"[19].

The voices of young people confirm how different it is to be a young person navigating the transition to mature adulthood now than it was even 20 years ago, and provide deep insights into how society and health care systems should respond[20]. Young people's journey to maturity is accompanied by increased levels of instability and risk[20], which helps to explain why we are facing this public health crisis.

The journey involves several key phases, beginning even prior to birth, with early childhood a particularly crucial stage during which key risk and protective factors influence life chances and trajectories of opportunity. However, the period from puberty to mature adulthood is also of enormous importance, with dramatic external changes in biological maturity, mirrored by less visible changes in brain structure and function, in psychological development and in social and vocational progress[17].

The challenge of evolving a sense of self, of individuating from one's family of origin and establishing a life and family of one's own is daunting, and stress, frustration, risk and loss are ambient within the ecosystem of growth. The philosopher J. Campbell characterized the "Hero's Journey" as a monomyth with deep relevance to the human condition[21], and this is a metaphor which is useful in normalizing the level of challenge and threat that we all face during the struggle for maturity. It creates the space for a "positive psychology" perspective, that is a strength-based stance to distress and struggle during the transition to adulthood. It also allows us to accept and see value in a soft border, a flexible boundary between mental health and mental ill-health during the struggle, and to validate a role not only for the "scaffolding" of the family and the social network surrounding the young person, but also for mental health professionals and treatment of mental "injury" and illness.

This concept navigates the space between the concern about labelling common experiences as abnormal and recognizing the crucial need for help and support, including expert medical and professional help under certain conditions. Finally, while it confronts and accepts the extent of the threats and challenges and the possibility of defeat, it holds out the hope of ultimate success even in the darkest times. These are all valuable elements for a positive, modern day approach to the mental health care of young people.

THE ECONOMIC IMPERATIVE

From a socioeconomic perspective, emerging adulthood is a crucial period for "mental wealth". Mental wealth is defined as an individual's cognitive and emotional resources that provide the foundation for educational and vocational success, high quality of life and significant contribution to society[22,23]. The development of mental wealth during emerging adulthood has impacts across the life course and, if disrupted, may perpetuate a cycle of poverty, homelessness or crime[24,25]. Mental ill-health in youth, therefore, influences the social cohesion and productivity of the whole community.

Society invests heavily in nurturing young people from birth to the threshold of productive life. If they become disabled or die during this transition, or even if they fail to reach their potential and underachieve, there is a serious and widespread erosion of productivity. The World Economic Forum first recognized this in 2011, when it discovered that mental illness makes the largest contribution to loss of gross domestic product among all non-communicable diseases, accounting for 35% of the global economic burden, followed by cardiovascular disease (33%), cancer (18%) and diabetes (4%)[26].

The World Economic Forum estimated that by 2030 mental ill-health alone would account for a loss of US$16 trillion in global economic output. This impact is specifically because of its timing of onset in young people and consequently its extended impact across the decades of productive adult life. Most young people do not receive evidence-based care in a timely or quality way, hence much of the burden of mental illness, while avertable, is *not* averted, resulting in chronic, persistent and disabling illness across the productive decades of adult life, causing enormous suffering and weakening economies and societies.

In terms of economic participation, the employment landscape is rapidly evolving and young people are facing one of the most disruptive workforce changes, due to economic developments in automation, globalization and collaboration[27]. Seventy percent of young people are currently entering the labour market in roles that will likely be obsolete or radically transformed over the next decade[27]. The young workforce has been casualized, and is highly insecure. Inequality is rising steadily across the world and even increased during the COVID-19 pandemic[28].

The future job market will place a high premium on skilled labor[27], meaning that educational participation and success will be critical. Forty-eight percent of people who develop a severe form of mental illness fail to complete high school[29] and the erosion of educational attainment surges further within higher education. Compared to their peers, young people with mental illness are nearly twice as likely not to be in education, employment or training (NEET)[30], reducing both the workforce and tax base. Together with an ageing population, a declining youth workforce and tax base will likely increase the burden on the working population, raise expenditure on long-term health care[31], and reduce economic growth.

While the economic impacts of mental ill-health are clear and overwhelming, adequate investment in mental health, including for young people, has been grossly neglected worldwide, especially in non-WEIRD (Western, Educated, Industrialized, Rich and Democratic) countries[32,33]. This state of affairs reflects a combination of factors, including morbidity and mortality from communicable diseases, widespread poverty as well as lack of political will and stability, and limited infrastructure. The influence of the COVID-19 pandemic on this mindset will be interesting to analyze.

The economics of mental health extend beyond the need for funding. Inaction or insufficient investment comes with a range of avertable and long-lasting costs, including lost productivity, loss of earnings and welfare dependency, that impact all of society[34-36]. Early diagnosis and treatment is one proven strategy to mitigate the social and economic impact of mental

disorders which can be scaled up[37]. The costs of inaction fall heavily on governments and economies, highlighting that policy-makers cannot afford to underfund youth mental health. Return on investment analysis enables decision-makers to compare investments in the youth mental health system[37] with those in other areas of the health system and the economy.

CURRENT STATUS OF MENTAL HEALTH CARE FOR YOUNG PEOPLE

To understand why such an obvious public health opportunity has been overlooked until recently, we need to examine the history and evolution of mental health care. It is only relatively recently that adult mental health care evolved from the alienist era of stand-alone psychiatric institutions to join the mainstream of general health care. This is a process by no means complete across the globe. Even where this has occurred, it has often been poorly designed and funded, and has continued to focus almost exclusively on the extremely acute or the prevalent cases, that is middle-aged people with chronic, persistent and disabling illnesses.

Young adults, where the bulk of incident cases emerge, were not placed at a premium, as are incident cases in cancer and other major non-communicable disease fields. Rather, they and their families found that they had to "prove chronicity" to "deserve" and justify access to a model of care characterized by a blend of the "soft bigotry of low expectations", the "clinicians' illusion"[38] and a culture of neglect and low morale. Early intervention has been a very hard sell in psychiatry[39-41].

If we now turn to child psychiatry, its origins are quite different. The sub-specialty originally arose from the child guidance movement, and initially focused on younger children. While in recent decades its focus has reached up to include adolescents and it is now labelled "child and adolescent psychiatry", it has adhered to a paediatric model in which the boundary with adult health care is set at 18 years on legal, rather than health and developmental grounds.

The epidemiology of mental illness and the developmental needs of young people demand a radically different approach in psychiatry[42,43]. Mental illness is the mirror image of physical illness, with the greatest need for care located during the period of maximum physical health, at least in modern globalized societies. Furthermore, while adult psychiatry has struggled for parity within health systems, child and adolescent psychiatry has faced an even greater challenge to establish itself, and remains seriously underdeveloped and underfunded. Even in the prosperous European Union, child and adolescent mental health services are sparse or invisible, except in a very small number of countries[44].

The result of the weak and divergent evolution of these two traditions within psychiatry is that adolescents and young adults, despite having the greatest level of need, have the worst access to timely, quality specialized mental health care. The same applies to primary mental health care which, just like specialized care, is poorly designed and culturally ill-equipped to engage and respond to mental ill-health in young people, who typically do not seek or access help from traditional primary care providers[45]. Young people are well able to explain why current health and mental health services simply do not appeal to or work for them[20].

In summary, the health system has been designed to meet the needs of people with physical illness, which means a dominant focus on young children and older adults. Mental health care has been "shoehorned" into this system with little foresight, logic or equity. The paediatric model of care simply does not work for mental health, as recent research has shown[46,47]. Not only the majority of young people fail to gain access at all or do so only after long delays but, even for those who do, an appropriate transition from child and adolescent mental health services to adult care is rarely achieved[48]. Access and quality for the 19-25 age group is also very poor.

The different origins and cultures of these care systems, funding neglect and the fact that the transition is demanded at the worst possible point in time are jointly responsible for young people's low rates of service access and engagement. Young people and their families are forced to navigate a new and often quite different system before they are ready and when they are least able to do so. Barriers to accessing appropriate care, or reluctance to engage with developmentally inappropriate services, are strong contributors to a majority of young people not accessing or receiving mental health care when needed.

The success of the early psychosis model and its "proof of concept" for early intervention[49] has encouraged the wider application of early diagnosis and specialized treatment for the full range of emerging disorders in young people[50-52]. The early psychosis model delivers timely, comprehensive evidence-based intervention from the earliest stages of psychotic illnesses with the necessary "scaffolding" assembled and supported so that young people maximize their chances of recovery. Consistent evidence supports its cost-effectiveness[53,54], and the embedding of specialist education and employment services, such as Individual Placement and Support[55], offers long-term economic benefits[37].

The early psychosis model has demonstrated, as with other non-communicable diseases, that early detection and pre-emptive stage-linked treatment will improve prognosis and reduce disability and disengagement. From initial service development in the early 1990s, there are now early psychosis intervention services established in many countries across the world[52,56-61].

While the principles of early intervention, co-design, and holistic biopsychosocial care could be translated from early psychosis to the full spectrum of mental ill-health in young people, it was clear to us, as we began this task in 2001, that the scale of unmet need and the epidemiology of mental illness demanded a more complex and tiered or staged approach. In any given region or catchment area, the incidence of psychosis is dwarfed by the total incidence of mental disorders in young people. This includes anxiety, mood disorders, eating disorders, personality disorders, and substance use disorders, and blends of these dimensions. Specialist services alone would inevitably fail to address the scale of the problem.

Early intervention demands rapid and smooth access to care and this all pointed to the essential value of a high volume primary care model[43]. It has been recognized for some time by the World Health Organization that the fulcrum of mental health care across the globe needed to shift to and focus on primary care[62]. There are so many advantages in pursuing this as the entry portal: reduced stigma, greater bandwidth and capacity, and genuine feasibility across most health care contexts, including low- and middle-resource settings, in terms of cost and workforce. However, the problem we immediately faced in high-resource settings, such as Australia, was that general practice and standard primary care was not seen by young people as a setting to seek help for mental ill-health and related distress. Nor was this setting youth friendly or sufficiently skilled or resourced to respond[20].

BUILDING A SYSTEM OF YOUTH MENTAL HEALTH CARE FOR THE 21ST CENTURY

In response to the limitations and failures of the traditional mental health system[20], a broad-spectrum youth mental health approach has emerged since the turn of the century and is gaining traction in many high-resource settings[63-65]. New models of integrated youth primary mental health care have spread across the globe[65]. The focus is now the age group 12-25 years, ending the harmful transition point at 18 years.

This focus requires developmentally and culturally appropriate design features that acknowledge the complex and evolving biopsychosocial issues, recognizing the developmental crises, fluid symptom patterns and comorbidity seen in this age group[42,43]. This means that services must be co-designed, accessible, with "soft entry" (i.e., no or very low barriers to entry), community-based, non-judgmental and non-stigmatizing, where young people feel comfortable and have a sense of trust, and their families and friends are included[66].

It also means that the center of gravity must be located in the community, with an enhanced primary care model, that a clinical staging approach[67] should be adopted, and that secondary or more specialized mental health care will have to restructure and align to enable more intensive and sustained, longer-term care.

An international network of academics, health professionals, educators, young people, families and other leadership – the International Association for Youth Mental Health (www.iaymh.org) – was established in 2010 to support this process of global reform. In 2019, the World Economic Forum started a formal partnership with Orygen to work with stakeholders worldwide to develop a Global Framework for Youth Mental Health[68]. This process involved literature reviews of the scientific evidence, global surveys, face-to-face workshops and extensive online and face-to-face consultations with young people and other key stakeholders from many different countries and settings. A number of principles were agreed upon and a framework for different levels of health resources was proposed.

The key principles underpinning the implementation of youth mental health care include: a) prevention and early intervention; b) youth participation, respect, empowerment and co-design; c) community engagement, education and consultation; d) "soft entry" without stigma or financial barriers; e) choice regarding options for access and for treatment and care; f) family engagement and support; g) scientific evidence as a key guide. The way models of care can be deployed in different resource setting is captured in Table 1.

It has proven relatively easy to get a global consensus around the principles to guide youth mental health reform. Translating these principles into practice is a more challenging step, but there has been encouraging progress in recent years in many parts of the world. These advances can be described within a comprehensive framework including the following key elements: a) community awareness; b) prevention programs; c) volunteers, youth and peer workers; d) digital mental health platforms; e) educational settings and workplaces; f) integrated primary youth mental health care; g) specialist youth community mental health care; h) residential care.

COMMUNITY AWARENESS

The first step in reducing the burden of mental ill-health in young people is to educate the public in every society about the nature and pattern of mental ill-health and how it can be prevented, recognized, and responded to safely and effectively as soon as it emerges. Community awareness, anti-stigma and mental health promotion programs have been successfully delivered in many countries in recent years, though most have been generic or adult focused[69,70].

There are many worldwide examples of youth focused awareness campaigns, which have been a mix of mental health promotion and education on the warning signs of emerging mental ill-health. Mental Health First Aid[71] has produced a version for adolescents[72] and this has recently been evaluated[73,74]. There are sustained benefits for participants, but benefits for young people have been difficult to demonstrate and the focus on under 18s is a significant limitation. "headspace Day" in Australia is another example (https://headspace.org.au/about-us/our-campaigns/). ReachOut, which was one of the first to use the power of the Internet to reach young people, is one of the best examples. More recently, Batyr has complemented an online approach with face-to-face strategies in educational settings. Jack.org in Canada is youth-led and delivers nationwide programs and campaigns in youth mental health awareness and promotion. In the UK, YoungMinds is creating a youth-led movement to improve mental health awareness and the support available to children and young people. These programs are described with some more details in the following sections.

ReachOut

Established in Australia in 1998, ReachOut is a web-based mental health promotion, early intervention and prevention service for young people aged 12-25[75]. Co-design and youth participation have been central to its development and delivery[76].

ReachOut aims to improve young people's mental health literacy, resilience,

Table 1 Delivering youth-specific mental health care across resource settings

	COMMUNITY	PRIMARY CARE	SECONDARY CARE	TERTIARY CARE
HIGH-RESOURCE SETTINGS	Community education, screening and early detection programs Prevention programs (e.g., anti-suicide, anti-bullying) School, university and workplace awareness and early detection programs Digital mental health platforms	Integrated youth (12-25 years) health and social care platforms as "one-stop shops" School and university mental health services Digital interventions and telehealth integrated with primary care	Multidisciplinary youth mental health systems providing face-to-face and online care closely linked to primary care and community platforms Complementary integrated digital platforms	A suite of specialized, co-designed youth inpatient and residential services linked to acuity and stage of illness Home-based acute care and assertive community treatment
MEDIUM-RESOURCE SETTINGS	Community education, prevention, and school-based programs Digital mental health platforms	Integrated youth health and social care platforms as "one-stop shops" School and university mental health services Digital interventions and telehealth integrated with primary care	Multidisciplinary community mental health teams (face-to-face or online) Complementary integrated digital platforms	Inpatient services distinct from adult facilities and home-based acute care if this is not feasible
LOW-RESOURCE SETTINGS	Community education, prevention, and school-based programs Digital mental health platforms	Volunteer, peer or lay worker programs (Friendship Bench concept) Digital interventions and telehealth platforms	Primary care health professionals, including general practitioners and volunteers, trained in youth-friendly practice and mental health skills, providing care within community primary care settings with face-to-face, telehealth and digital options	Home-based acute care

social connectedness, and help-seeking behaviors through self-help information, peer support forums and referral tools[75,77]. It also offers support and resources to parents and schools. The service is accessed by more than 2 million people in Australia annually[78].

Nearly three-quarters of young people accessing ReachOut are experiencing high or very high levels of psychological distress[75]. A recent evaluation found that the service is accessible and relevant to young people, increases help-seeking behaviors, and significantly reduces depression, anxiety, stress and risk of suicide[78,79].

batyr

Launched in 2011, batyr is a preventive mental health organization in Australia that aims to reduce stigma and promote help-seeking. The batyr model draws upon a body of evidence highlighting the association between disclosure, stigma and well-being[80].

batyr delivers educational workshops on mental health in schools (batyr@school), universities (batyr@uni) and workplaces (batyr@work). Presenters are trained through the Being Herd program, a free two-day workshop that aims to empower young people (18-30 years) to share their lived experience of mental ill-health.

The Being Herd program has trained over 700 young people to date and has been associated with improved well-being in trainees as well as reduced self-stigma and stigma towards others[80]. The batyr@school program has reached over 200,000 young people across 352 secondary schools in Australia.

An unpublished randomized controlled trial found that batyr@school reduced stigma and increased attitudes and intentions to seek professional mental health care[81]. These findings were maintained three months after the program[81]. Both secondary and university students report that the batyr programs are highly engaging (82% and 85%, respectively) and increase the likelihood of seeking mental health support (70% and 78%, respectively).

Jack.org

Recognizing an absence of programs to train youth mental health advocates in Canada, Jack.org was established in 2010 as a youth-led mental health promotion and prevention initiative targeting young people aged 15-24.

The organization aims to increase mental health literacy, reduce stigma, and improve help-seeking behaviors through three core programs: Jack Talks (peer-to-peer mental health presentations), Chapters (community-based, youth-led working groups), and Summits (youth-led conferences). Online resources are also available to educate young people on how to support their peers.

In 2019, Jack.org reached over 170,000 young people, and 446 Jack Talks were presented by trained and certified speakers. Eighty-seven percent of Jack Talks attendees report that the presentation helped

them think more positively about mental health.

YoungMinds

YoungMinds is a UK charity focused on ensuring that all young people receive the mental health support that they need when they need it. It offers online support, workshops and face-to-face training to young people, parents, schools and professionals.

In 2019/2020, nearly 2.5 million UK users visited the YoungMinds website and 11,959 parents and carers contacted its helpline, with 77% of parents reporting that they modified their approach to support their child following advice from the helpline[82]. An evaluation found that the helpline is beneficial to 88% of those who use it[83]. In 2019/2020, YoungMinds provided in-house training to 70 schools and organizations, with 97% of trainees rating the course highly[82]. Training is delivered to over 10,000 professionals each year.

YoungMinds also offers a flagship three-year activist program for young people aged 14 to 25 with a lived experience of mental ill-health, who campaign to raise awareness of youth mental health. Ninety-seven percent of activists reported better knowledge of their mental health and 83% felt more confident to speak about mental health issues[82].

PREVENTION PROGRAMS

Prevention is better than cure, and many of the risk and protective factors for mental ill-health are well characterized[84]. However, there is evidence for a rise in incidence and prevalence of mental ill-health in young people and of suicide rates, especially in young women[12,85]. A role is suggested of social media and new technologies, climate change and a range of socio-economic forces in undermining the mental health and well-being of young people[18,86].

Specific programs targeting some of these risk factors, for example, anti-bullying programs[87], chatsafe to reduce risks of suicide via an online strategy[88], and resilience programs in schools[89,90], have some value[91]. However, other risk factors are not especially malleable and are more widely social and economic in nature and scope (e.g., climate change and social media).

Prevention is a concept that extends across a spectrum and includes all stages of care. Fusar-Poli et al[92] recently reprised in this journal the US Institute of Medicine model of the spectrum of prevention in mental health[93], highlighting the distinction between universal, selective and indicated prevention and confirming that indicated prevention has been the most promising avenue for progress in recent years and has further potential[94].

As with other major non-communicable disease areas such as cancer, all aspects of prevention and preventively oriented treatment are valuable. However, what can be delivered in the foreseeable future in terms of universal prevention[95,96] remains uncertain. Preventive health care can operate across the full spectrum, and unnecessary false dichotomies between classic primary prevention and treatment merely undermine consensus and momentum[92].

"SOFT ENTRY": INNOVATIONS WITH VOLUNTEERS, YOUTH AND PEER WORKERS

The extreme shortage of mental health professionals in low-resource settings, and the relative shortage due to high need and inadequate funding in middle- and high-resource settings, has driven valuable innovation.

The most famous example of this is the Friendship Bench[97], devised and implemented in Zimbabwe. This concept has been enhanced as a "Friendship Bridge", a flexible way of engaging marginalized young people from a variety of cultural backgrounds. Similarly, in some high-resource settings, youth mental health models have drawn upon students and other young volunteers to facilitate engagement and make it more informal and less of a barrier (e.g., https://www.ease.nl and https://headspace.dk).

The advent of paid peer workers in youth mental health has similar goals and benefits[98,99]. With appropriate training, volunteers and peer workers can not only help to absorb substantial need for care at the front end of services, but also make the experience of entering care less challenging and more welcoming, especially for first time users, offer compassionate support, and deliver simple therapeutic interventions.

This is a component of youth mental health care which can be developed in all communities, and is in fact not a substitute for scarce workforces, but adds substantial value irrespective of the level of health financing and resources.

DIGITAL MENTAL HEALTH PLATFORMS

Young people are digital natives and the digital world is a fundamental element in their lives. While the establishment of integrated youth mental health services has improved young people's access to mental health care (see below), the volume of demand and workforce challenges have highlighted the need to develop further platforms that can adequately address the scale and diversity of need. The delivery of high quality mental health care through digital technology is considered key to this endeavour, emphasized by the COVID-19 pandemic[100].

The integration of digital technologies within youth models of care has several advantages, including improved service efficiency and access to care[100,101], potentially reducing the treatment gap in all resource settings. While the use of digital technologies in low- and medium-resource settings is acceptable, feasible and potentially effective[102], particular considerations are needed regarding factors such as language, culture, level of education, access to technology, digital literacy, and infrastructure[103].

There has been a rapid growth in digital mental health research[104] and, while there have been challenges in the implementation and uptake of new digital technologies[105,106], their integration within clinical services has the potential to enhance engagement[107].

For anxiety and depression in young people, a range of digital mental health interventions are available[108]. These in-

volve text-messages (e.g., ReachOut, Rise Up), computer games (e.g., SPARX), online programs (e.g., MOST, MoodGYM), video games (e.g., Maya), online courses and chat groups (e.g., Master Your Mood), and mobile apps (e.g., Mayo Clinic Anxiety Coach). Interventions that involve supervision or regular contact with a therapist are more likely to be effective than unsupervised educational programs. Engagement and retention are issues requiring attention[108].

Promising platforms that combine face-to-face mental health care with digital interventions are described in the following sections.

Moderated Online Social Therapy (MOST)

Developed in Australia by a multidisciplinary team of clinical psychologists, designers, young adult novelists, comic artists and software engineers, Moderated Online Social Therapy (MOST) is a seamless digital solution adopting a user-centred design model. It is safe, effective and valued by clinicians, young people and families.

The intervention offers young people continuous access to evidence-based therapy and peer and clinical support from any Internet-enabled device. All included therapy has been adapted and enhanced based on a decade of youth feedback and usage data, to ensure that the young person's perspective is captured and the range of interventions feels uniquely relevant to their daily life. This therapy is embedded within a supportive online community of other young people working on their mental health, aiming to shift the treatment experience from one of isolation to one of shared mission.

MOST combines guided therapy journeys, targeted coping strategies, and mental health tracking with a social network of peers, providing an enriching therapeutic environment where young people can safely work towards their goals, take positive interpersonal risks, and broaden and rehearse coping skills for long-term wellbeing. Therapists work alongside face-to-face clinicians to offer wrap-around support to young people and provide advanced intervention tailoring. Specialist vocational consultants further support young people with work and study.

MOST seamlessly blends human and digital support to facilitate rapid detection and response to any indicators of risk or relapse between scheduled clinician contacts. It is an evolving model, and through successive iterations it has been adapted for a range of populations: first episode psychosis[109-111], ultra-high risk for psychosis[112], depression[113], social anxiety[114], mental ill-health[115], suicidal risk[116], and relatives[117,118].

A recent randomized controlled trial[110] in young people with psychosis demonstrated that Horyzons (MOST version for youth psychosis) was associated with a 5.5 times increase in the likelihood to find employment or enrol in education, as well as half the rates of visits to emergency services and hospital admissions due to psychosis, compared with treatment as usual, over 18 months following discharge from specialized youth psychosis services.

Synergy

Also in Australia, Synergy is a digital platform that aims to enhance the health, social and physical outcomes of young people through the delivery of personalized and measurement-based care[119]. The platform is embedded within youth mental health services and can be configured to meet local needs.

Co-designed with end-users[120,121], the platform facilitates a number of key processes, including multidimensional assessment, allocation of clinical stage, feedback of assessment results, shared decision-making, and monitoring of change over time[119]. A clinical trial of Synergy is currently underway[122].

The "digital clinic"

In the US, the "digital clinic" offers a hybrid model of mental health care, augmenting and extending services at the Beth Israel Deaconess Medical Center in Boston with a smartphone app[107]. The clinic has a core focus on therapeutic alliance, measurement-based care and shared decision-making[107].

Components of the clinic have been specifically designed to address key barriers among patients and clinicians that reduce uptake and engagement with digital mental health care[107]. These components include the Digital Opportunities for Outcomes in Recovery Services (DOORS)[123] and the Digital Navigator[124,125] programs, which provide digital literacy training to patients with serious mental illness and clinicians, respectively.

The mindLAMP (Learn, Assess, Manage, Prevent) app, a digital health platform used by the clinic and designed in consultation with end-users, is customized to each patient and has the potential to advance youth mental health care[126]. Core functions of the app include education, assessment via surveys and sensors, digital phenotyping, self-management tools, data sharing with patients, and clinician support.

The mindLAMP app can be adapted for implementation in all resource settings[126] and is currently being used by researchers and clinicians in over 20 sites globally. Preliminary findings of mindLAMP have highlighted the feasibility and potential utility of digital phenotyping to augment clinical care, although individuals under 25 years were found to complete fewer activities on the app than older individuals[127].

SCHOOLS AND EDUCATIONAL SETTINGS AND WORKPLACES

Educational settings offer the opportunity to promote mental health and wellbeing, to educate students and teachers about mental ill-health and how to recognize and respond to it, and to offer a primary care level of initial response[128-130]. This logic extends beyond school settings to university and other tertiary educational settings, where greater recognition of the opportunities for proactive youth mental health care is emerging in many countries[131-133].

These settings are best regarded as community-based populations of most, but

not all, young people in which a bespoke primary care level system of care can be formulated and linked to other resources, including specialist care and digital mental health platforms.

INTEGRATED PRIMARY YOUTH MENTAL HEALTH CARE

Integrated health care[134] is a widely endorsed approach to optimizing health care, in view of its capacity to meet multiple health and social needs from a single platform of care. Its adaptation to young people has been at the vanguard of reform in youth mental health care over the past two decades in high-resource settings. As a version of primary mental health care[62], it should be at the heart of global reform, as a gateway to and component of staged care[65], and ultimately in all resource settings[62,68].

Although there were earlier examples of this approach[135], the trigger for global spread can be traced back to 2004, when the Australian government agreed to fund a new program of enhanced primary care, named headspace. This program was designed by Orygen and partners, including national professional organizations representing general practice and psychology[136]. Other countries soon followed, notably Ireland and Canada[50,137-139].

This wave of innovation in youth mental health care is now spreading globally, with at least 12 other countries adopting an integrated youth primary care model that is adapted to, and often limited by, the local cultural, health finance patterns and workforce context. The success of the headspace model, in particular, has seen its expansion into Denmark, Israel, the Netherlands, and Iceland. Similar programs under different branding have also been established in Ireland, Canada, Singapore, and the US. New Zealand and France had independently developed a similar model of care a little earlier.

Common features of these models include the following. First, there is a physical, developmental and cultural separation of youth mental health platforms from those for both younger pre-pubertal children and those for older adults, with an overdue shifting of the upper boundary of youth mental health care from 18 to 25 years.

Second, the value of youth participation and co-design is a universal success factor and has not only changed the culture, but also increased trust, and greatly minimized the stigma associated with help-seeking. This has been enhanced by the creation of trusted, stigma-free brands, something which has not been previously achieved in mental health care.

Third, the "one-stop shop" aspect of integrated care, from a single location with high visibility in the heart of the local community, enables better multidisciplinary care to occur, and helps to future-proof the service against the risk of defunding, to which more diffuse wrap-around models, based on fragmented funding streams, are more vulnerable. This approach also mobilizes local community support, including from local political representatives, and draws in collaborative support from other services and agencies.

Fourth, a flexible or "light touch" approach to diagnosis, especially in the early fluid stages of mental ill-health, and a needs- and strengths-based stance, which suits primary care, has been a common feature across many settings and is congruent with the staging model. Finally, a critical success factor, which improves outcomes, is ensuring model fidelity through accreditation, continuous monitoring and quality improvement, and trademark licensing strategies. This limits erosion of the evidence-based aspects of care, often justified under the guise of local adaptation.

Common challenges that have emerged are related to patterns of commissioning, workforce, professional work practices, and the lack of secure financial channels to support the model of care. A devolved pattern of commissioning undermines the capacity to safeguard model fidelity. Many of the examples so far struggle to attract and retain the full range of professionals and rely more heavily than is ideal on youth volunteers and peer workers, invaluable as these are in any youth mental health approach.

Even when the model has a good balance between youth volunteers/peer workers and mental health professionals at the primary care level, the success of the "soft entry" approach in enabling young people with all levels of need to gain access means that a cohort of young people with more complex and enduring mental health conditions are welcomed to enter the service. However, the model currently lacks the capacity, the skillsets and the tenure to fully meet the needs of this subset of young people and improve their outcomes. We have used the term "missing middle" to denote this cohort, since, due to the underfunding and neglect within specialist mental health care, even in high-resource settings, they fail to gain access to the next tier of care unless they reach a threshold of acute and severe illness or chronicity[140].

Nevertheless, affording primary care access at an early stage does at least highlight the existence of this crucial group of young people from whom spring the ranks of the future severely mentally ill, and creates the potential for earlier preventive treatment. A hidden waiting list of people with a need for care is brought out of the shadows and ultimately must be responded to.

Examples of programs of integrated primary youth mental health care are described in more detail in the following sections.

New Zealand: Youth One Stop Shops and Piki

New Zealand pioneered the establishment of "Youth One Stop Shops" in 1994. These provide young people (aged 10-25) with a range of accessible, youth-friendly health, social and other services in a "wrap-around" manner.

An evaluation of 14 services in 2009 revealed that occasions of service ranged from 2,000 to 15,000 per area, with a mean of 11,430[141]. While objective data regarding improvements in access and health were unavailable, young people (94%) and stakeholders (89%) reported that the service was effective in improving health and well-being[141].

Following successful pilot of Piki, a youth mental health service for young people aged 18 to 25, the New Zealand govern-

ment recently committed to a rollout of youth-specific primary mental health and addiction services for young people aged 12 to 24 years. Services in 13 locations have been announced to date. These services will be offered in a range of places, including in Youth One Stop Shops and community centres.

France: Maisons des Adolescents

The "Maisons des Adolescents" (MDAs), which began in 1999 in Le Havre, France, are integrated health care services for young people with physical, psychological or social problems. While the target age range is 11 to 21 years, sites can extend this to 25 years[135]. Operating under a common brand across 104 locations and with a national office in Rennes, each centre provides care to between 700 and 1,000 young people each year, and the average number of visits is between two and three.

Young people report that the service contributes to their well-being, while professionals are satisfied that the service responds to individual needs[142]. Services are varied in the content they offer, which includes a "health and prevention space" for listening and assessment, mobile teams for hospital in-reach and also home and community outreach visits, arts and cultural programs, vocational support, specialist consultations and network meetings.

Steps have been taken recently to improve regulation and standardization of the model to optimize the care provided, prioritize needs and adapt the approach to new societal issues. As with other models, there is evidence of tension between a light touch "listening" stance and more therapeutic interventions.

Australia: headspace

headspace was funded and designed in 2005 by the Australian government in response to an extensive advocacy campaign for reform and investment in a national youth mental health program, which was motivated by low levels of awareness, access and quality of mental health services for young Australians. The campaign gained bipartisan political support, and government funding was secured to support the design and implementation of the program initially within only ten Australian communities from 2006[66]. This has progressively been scaled up to 136 centres, through a series of government funding rounds, and aims to reach 164 communities by the end of 2023[143].

Over 130,000 young Australians access a range of services via headspace every year, and over half of young people attending headspace present with high or very high levels of psychological distress[144]. By late 2020, headspace had supported 626,000 young people with over 3.6 million occasions of service[145].

The headspace model provides a youth-friendly "one-stop shop" service for young people to access a range of health and social programs, including mental health, physical and sexual health, vocational and educational support, and drug and alcohol education and interventions[43,66]. A national online support service (eheadspace) is also available over extended hours, where young people can chat with a mental health professional online or by phone.

headspace also delivers mental health programs in schools nationally, in partnership with beyondblue (www.beyondblue.org.au), which enhance mental health literacy and skills among teachers and offer suicide postvention support[145]. Online work and study support is available to complement face-to-face vocational (Individual Placement Support) interventions.

headspace operates on an enhanced primary care model, providing a multidisciplinary team structure with close links to local community supports (e.g., schools and specialist mental health care). It is a form of franchise with a national brand which requires adherence to a measurable template of care. Until 2016, the headspace national office commissioned a single lead agency within a wider local consortium at each site to deliver the service. Now 31 devolved regional primary health care networks perform this function on behalf of the Australian government, while the national office assesses adherence to the model and controls the license and trademark.

headspace has undergone two separate independent evaluations[146,147], which showed major improvements in access for young people, including for marginalized groups, notably Indigenous and lesbian, gay, bisexual, trans and intersex (LGBTI) young people. More than 60% of young people experience short-term improvements[148], and a follow-up study of those who engage has shown sustained benefits with high levels of satisfaction among young people and families[149]. A third evaluation is in progress.

The current headspace funding model is modest and supports only brief episodes of care, yet open access is provided to *all* young people, including the "missing middle", the large cohort of young people who need more intensive, sustained and complex interventions but fail to access them. In Victoria, specialist services are now being aligned with the 12-25 headspace age range and will be substantially boosted[150]. Early psychosis programs linked with headspace exist in a number of regions of Australia, also span the adolescent-young adult age range, and can be expanded transdiagnostically to fill this gap.

The rising level of unmet need and the widely known and trusted brand and entry portal are now resulting in increasing waitlists[151]. Workforce shortage, and the relative financial weakness of the model and of the specialist back-up system of care, are issues that must now be addressed. Fortunately, political and community support for headspace has led to a boost in investment in the 2021 federal budget.

headspace, as a disruptive and popular reform, and still a work in progress, has had its critics, which to a degree have been helpful in eliminating flaws and improving the model of care[39,152-154]. Finally, the COVID-19 pandemic created obvious challenges, generating an increased need for care with reduced accessibility[7]. The latter was buffered by the federal government's support for telehealth and mobile outreach.

Ireland: Jigsaw

In 2006, in the context of a national reform, concern about youth suicide, and influence by headspace in Australia, the

One Foundation created headstrong as the national youth mental health foundation of Ireland. Jigsaw became the publicly facing brand for the service and later the single brand for the whole organization[139,155].

Prior to its development, there was very limited mental health access available to young people in Ireland, particularly for those with mild to moderate mental health needs, with state funded child and adolescent mental health services seriously under-resourced and only able to provide care to a small minority of young people with more severe mental illness, and not even up to the age of 18.

Jigsaw's approach incorporates free one-to-one clinical supports and brief clinical interventions that are accessible to young people when and where required. Community and school based programs are additional features.

The program has grown from five pilot sites in 2010[155] to 14 services in 2020 (including one digital service), with an additional service opening in 2021. Services have provided access and care to over 44,000 young people since 2007. The program is highly accessible and significantly reduces psychological distress (62% aged 17-25 show a reliable and clinically significant improvement), with high levels of satisfaction among young people and their parents[156-158].

For a number of years, Jigsaw was only funded by philanthropic sources, but eventually the national government came on board, and in 2015 the program was included in the national Health Service Executive annual service plan and received significant mainstream funding. This funding has grown year-on-year to support the expansion of services, and the Health Service Executive now funds the majority of costs associated with service delivery.

The challenge, as in Australia, now involves filling the gap between Jigsaw, as the entry point to youth mental health care with only brief and limited capacity, and the specialist mental health services for young people, which needs major reform and investment to engage with the primary care reform. A stronger role for general practitioners is hampered by the lack of universal health care and government funding for primary care in Ireland.

Canada: ACCESS Open Minds, Foundry, Youth Wellness Hubs Ontario, Aire ouverte

Youth mental health reform in Canada followed a common pattern, with catalytic leadership from philanthropy. The Graham Boeckh Foundation allocated substantial funding, in partnership with the Canadian Institutes for Health Research, to create ACCESS Open Minds, a pan-Canadian network transforming mental health care for young people in 16 diverse communities (seven provinces and one territory), with an emphasis on high-risk populations (e.g., Indigenous communities)[137,159].

The ACCESS Open Minds model is adapted to local circumstances, reflecting the geographic, political and cultural diversity in Canada. Key elements of service transformation within each site include: systematic service planning; early case identification; rapid access; integrated youth space; appropriate care; active youth and family engagement; training of clinical staff; and building research and evaluation capacity[137].

A total of 7,539 young people between May 2016 and August 2020 have received services with rapid access, high levels of satisfaction and small to medium effect size improvements in distress, symptoms, and social and vocational functioning[160].

A wide range of clinical and social services are offered. In contrast to other models, the majority of young people are experiencing moderate to severe conditions[160], and it is this subgroup that improves more with the interventions that are provided. A key feature has been the success achieved with Indigenous communities, LGBTI and ethnic minorities, in which trust and ease of access has been demonstrated[160]. Evaluation of ACCESS Open Minds is underway[161].

The widespread advocacy and support from the Graham Boeckh Foundation has led to several provincial integrated youth services initiatives in Canada. These include Foundry in British Columbia, Youth Wellness Hubs in Ontario, and Aire ouverte in Quebec.

Established in 2015, Foundry is a network of service centers across British Columbia, offering low-barrier (i.e., self-referral, walk-in and free) access to mental health, substance use, general and sexual health care, and social services. A team of care and service providers work with each young person, and services are appropriately targeted to the young person's level of need using a stepped care approach.

Each Foundry centre is operated by a lead agency that brings together local partners, service providers, young people and caregivers. During the first two and a half years, 4,783 young people accessed care through six service locations. Eighty-one percent of young people who accessed the service had high or very high levels of distress[162]. The model has improved outcomes and ensured greatly improved access to marginalized subgroups, including Indigenous, LGBTI and others, and is continuing to expand across the province.

Youth Wellness Hubs Ontario was initiated following the development of three integrated youth mental health services launched in Toronto as part of YouthCan IMPACT, a federally-funded randomized controlled trial of the integrated youth mental health service model compared to treatment as usual in hospital-based outpatient adolescent psychiatry services[163].

In 2017, the Government of Ontario expanded the integrated youth services model to six additional communities. Initial service delivery emphasized integration of existing mental health, substance use, general health and social services, provided in-kind, with modest funding enhancement from government and philanthropy. These services unified under the Youth Wellness Hubs Ontario umbrella to form a network of ten integrated youth services which was included in the Ontario government's strategic mental health plan and secured permanent funding[164]. Work is ongoing to expand the model and demonstrate its feasibility, appropriateness and outcomes in Ontario's diverse communities.

In the province of Quebec, a network of integrated youth services ("Aire ouverte") has also been established for young people aged 12-25. Similar to the above, these services aim to provide low-barrier and easy access to a range of health and social services. There are currently three centres,

with others due to open throughout the province.

Denmark: headspace

headspace Denmark was established in 2013 as an initiative of Det Sociale Netværk, a non-governmental organization. While based on and branded similarly to the Australian model, the Denmark model has been adapted to meet local needs.

headspace Denmark is a free support and counselling service predominately delivered by trained volunteers, including young people, who work in pairs. The service does not yet offer clinical treatment to young people. Instead, it provides a young person with "someone to talk to". Approximately one in five young people accessing headspace Denmark are referred to other services for treatment or specialized care.

At present, there are 28 centers in Denmark in 26 municipalities (in addition to a nationwide anonymous video and text-based chat service). The government is now engaged and contributing funds. Through continued state co-financing, it is anticipated that headspace Denmark will expand to 32 centers in 2022, which will establish it as a nationwide face-to-face service with 50% coverage, and expand its position as the largest preventive and mental health-promoting civil society project for vulnerable young people in Denmark. Formal evaluation of headspace Denmark is currently underway.

Introducing clinical expertise and, as elsewhere, building a bridge with specialist clinical services for young people, will be crucial challenges.

Iceland: Bergid headspace

Bergid headspace was established in Iceland through the advocacy of S. Bergsdottir. Since 2019, this low-threshold support and counselling service operates in Reykjavík, with outreach counselling available in other regions of Iceland in addition to online. By the end of 2020, a total of 390 young adults had accessed its services.

A range of data, including self-report questionaires, are collected. The average number of sessions attended is four, but young adults often return for subsequent episodes of care. The average age of those who sought services is 19 years, and 90% of the individuals are from the capital area around Reykjavik.

Israel: headspace

headspace Israel was established in 2014 in response to low help-seeking rates and a lack of public health services for young people with emerging mental ill-health. Once again philanthropy, this time from Australian sources, was instrumental in the service being established. Commencing in Bat Yam, a second site in Jerusalem has been added.

headspace Israel is a youth-friendly, multidisciplinary enhanced primary care model ("one-stop shop"), with close links to locally available specialist services, schools and other community organizations.

In its first year of operation, headspace Israel successfully increased the level of accessibility and familiarity of mental health services available to young people, with 652 youth accessing the service in Bat Yam.

Netherlands: @ease

@ease, which began in January 2018 in Maastricht and Amsterdam, is a walk-in support and counselling service for young people delivered mainly by trained volunteers (including psychology students and young people).

Since @ease was established, it has expanded to Rotterdam, Gröningen and Heerlen. It has been complemented by an online chat service and by psychiatric and other professional support, and over 1,000 young people have accessed care to date.

United States: allcove

In the US, the allcove program, developed through the Stanford Psychiatry Center for Youth Mental Health and Wellbeing, has opened its first two centers in 2021. Created through a collaboration with Santa Clara County, the first two allcove sites are in San José and Palo Alto.

Inspired and supported by headspace Australia and Foundry, this US integrated youth mental health model for young people aged 12-25 years will include early mental health care, primary medical care, substance use services, peer and family support, and supported education and employment services.

The State of California has committed seed funding for a further five centers in San Mateo, Sacramento, Los Angeles (two centres) and Orange counties. Potential expansion across five other states is also in progress.

Singapore: Community Health Assessment Team (CHAT)

Established in 2009, and building on the Singapore Early Psychosis Intervention Programme, CHAT is a national youth mental health check and outreach program under the Institute of Mental Health[165].

CHAT focuses on young people aged 16-30, and provides free, personalized care in a non-stigmatizing environment. The service comprises allied health professionals, doctors, administrative support, youth mental health advocates, CHAT ambassadors (a volunteer-based youth peer group), an outreach function, webCHAT (an online screening service), and on-site brief support to young people with poor access to specialist services[166].

Over its first decade of operation, 3,343 young people (54% of all referrals) received a complete mental health assessment at CHAT. Forty-seven percent experienced a 25% or higher reduction in distress, while 20% showed a 6-25% reduction[166].

United Kingdom

While no systematic health care youth mental health reforms have emerged so far across the UK, the same issues have influenced service provision through a system of variable Youth Access centres at local levels.

In several parts of the UK, notably Norfolk and Birmingham, specialist mental

health services have restructured to accommodate a youth mental health perspective with some success[167-169]. Further reform is under consideration by the national government.

Hong Kong

The success of early psychosis reforms in Hong Kong[170-172] has prompted the academic and clinical leadership to explore youth mental health reform more broadly, and a series of surveys have been conducted to prepare for this.

The recent social unrest and the extreme pressures mounting upon the young people have underlined the crucial need for better mental health support and access.

SPECIALIST COMMUNITY MENTAL HEALTH CARE

In high-resource settings, youth-specific specialized community mental health care is an essential back-up system for the integrated primary care platforms for young people. A key barrier that has to be overcome is the paediatric model of child and adolescent mental health services, with its low level of resourcing and a transition point to adult mental health services anchored at age 18, as discussed above.

A recent breakthrough in Victoria, Australia[150] will align the specialist mental health services with the headspace network's age range (12-25 years) and enable a common clinical governance system to operate both tiers of care in a seamless manner. This alignment and vertical integration will facilitate the operation of a clinical staging approach to treatment, and should enhance the effectiveness of care and outcomes.

RESIDENTIAL CARE

In high-resource settings, a suite of residential options for young people is needed and possible, ranging from acute inpatient care, with the alternative of intensive home-based care or "hospital in the home", through subacute or recovery oriented therapeutic programs and longer-term residential care in the community.

It remains a work in progress to fund and design these facilities in partnership with young people and families. Such settings need to be streamed separately from young children and older adults, and must be designed and operated with gender, cultural and developmental maturity issues at the forefront.

PARADIGM TENSIONS

Any change which seeks a paradigm shift will encounter major challenges and resistances, and these have indeed emerged as the youth mental health reform has unfolded. Some of these challenges are conceptual and political; others are practical. Psychiatry has struggled to overcome an intrinsic pessimism and lack of self-belief, which has been perpetuated by stigma, discrimination and low status within health care and medical research.

Underfunding and the sense that mental health care is at best a zero-sum game or, at worst, a shrinking pie, leads different areas of psychiatry to compete with one another and undermines progress in any one field[39,41,173]. It is difficult to secure unity of purpose and mobilize a team effort within mental health to achieve beachheads and objectives of any kind. Doubt is introduced even when solid or highly promising scientific evidence has been assembled, for reasons and in ways that we do not see happening in other areas of health care[40]. Scepticism is a vital force in an empirical and pragmatic field like medicine, but it can be counter-productive and harmful if excessive or motivated by insecurity, vested interest or a self-defeating mindset.

A new paradigm of youth mental health care can be seen as a threat to the *status quo*, or alternatively as a way of strengthening both child and adult psychiatry. There are indications that child and adolescent psychiatry at least is starting to embrace the opportunity. Yet the recent reforms in this area have not flourished through logic and scientific evidence alone, essential as these safeguards and guides assuredly are. Nor have they been hampered by doubt disguised as genuine critique.

A key success factor to date has been consumer demand and support. Determined global leadership from a range of clinical and academic pioneers has also been a key feature. Economic arguments are now adding strongly to the momentum, since mental health care, largely due to its timing in the life cycle, is the one remaining area of health care where major return on investment is achievable.

CONCLUSIONS

Youth mental health care has the potential to be a transformational new paradigm, one which could inspire societies to value and develop much greater faith in mental health care. The energy and optimism that can be generated, if combined with a positive experience of care, better outcomes and return on investment, are powerful forces for change. We have argued here for youth mental health care to assume its place as a critical transitional zone within a lifespan approach to mental health care. This ultimately involves the creation of a new professional field, not merely new models of care.

The main feature of the emerging models of youth mental health care is shifting and embedding the focus upon the transitional developmental stage from puberty to independent adulthood, which extends approximately from 12 to 25 years, though the boundaries are flexible and variable. The engagement of young people and families in the conception, design and operation of the models, and the strong community and political support they have mobilized, are essential components of their success. The reform has typically been led by clinicians, academics and philanthropists. Politicians, however, waiting for solutions to the pessimism and stagnation in mental health care, have often been eager to support these optimistic approaches to early intervention and youth mental health.

Features that reduce barriers to entry and promote a normalizing and welcoming entry portal, such as the use of volunteers and peer workers, a de-emphasis on formal diagnosis and a focus on encourag-

ing help-seeking for mild and potentially transient problems, can create tensions with professionals from more specialized settings. The under-resourcing of youth mental health care and the understandably defensive mindsets contribute to this tension. In fact, if we can assemble the necessary resources to build a flexible and proactive system of staged youth mental health care powered by new workforces, including a new sub-specialty of "youth psychiatry"[174], then this tension can be dispersed and seen for what it is – a false dichotomy, one of many in the mental health field.

These new infrastructures of youth mental health care are enabling the early stages and boundaries of potentially serious mental illness in young people to be understood and mapped across the transdiagnostic landscape for the first time. They allow novel therapies to be explored and trialled, and their safety, acceptability and effectiveness to be explored and examined in a transdiagnostic setting[175].

Critics have alleged that this strategy produces harm through labelling and overmedicalization of teenage angst and overtreatment. In fact, with a needs-based approach, in which diagnosis is de-emphasized and treatment sequenced according to clinical staging, with its intensity guided by risk-benefit balance considerations, the opposite is true, and the hard data from all these programs strongly support the need for care that the help-seeking young people manifest.

The high degree of unmet mental health needs in young people worldwide demands that youth mental health care be elevated to an absolutely top priority in health care. Global reform and adequate investment in youth mental health will not only substantially improve the health and lives of young people, but will pay for itself and promote mental wealth for all of society.

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