Transitioning to 21st Century Mental Health Care: Early Intervention for Young People with Emerging Mental Disorders

Patrick McGorry MD PhD,
Professor of Youth Mental Health
University of Melbourne
Mental Wealth

Why economists are our new best friends
Forecast loss of output caused by non-communicable diseases worldwide, 2011-30

$tn (2010 $)

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Sources: World Economic Forum; Harvard School of Public Health; Mental Health Atlas; WHO; The Economist
Early Intervention: A general principle in modern healthcare
Economic Evidence and EIP


DEVELOPMENTAL PERSPECTIVE: THE MENTAL WEALTH OF NATIONS

Mental capital over the course of life

Mental capital

DEVELOPMENTAL PERSPECTIVE: THE MENTAL WEALTH OF NATIONS

Beddington et al 2008 Nature
‘If individuals are forced to choose between saving the life of a 2-year-old and saving it for a 22-year-old, most prefer to save the 22-year-old. A range of studies confirms this broad social preference to “weight” the value of a year lived by a young adult more heavily than one lived by a very young child or an older adult.’

Murray and Lopez 1996 (GBD)
Why youth mental health?

Mental ill-health is the leading cause of disability and death among Australians aged 15-24

- 75% of people with a mental illness first experience symptoms before the age of 25 years.
- More than 50% of all young people will experience a period of mental ill-health during the transition to adulthood.
- Each year over one million young Australians will suffer from mental ill-health.

Adolescent mental health 3

The new life stage of emerging adulthood at ages 18–29 years: implications for mental health

Jeffrey J Amett, Rita Zukauskiené, Kazumi Sugimura

Since 1960 demographic trends towards longer time in education and late age to enter into marriage and of parenthood have led to the rise of a new life stage at ages 18–29 years, now widely known as emerging adulthood in developmental psychology. In this review we present some of the demographics of emerging adulthood in high-income countries with respect to the prevalence of tertiary education and the timing of parenthood. We examine the characteristics of emerging adulthood in several regions (with a focus on mental health implications) including distinctive features of emerging adulthood in the USA, unemployment in Europe, and a shift towards greater individualism in Japan.

Lanpert Psychiatry 2014, 1:569-76
This is the third in a Series of three papers about adolescent mental health
Clark University, Worcester, MA, USA (J Amett PhD)
Cumulative Prevalence of Psychiatric Disorders by Young Adulthood: A Prospective Cohort Analysis From the Great Smoky Mountains Study

William Copeland, M.D., Lilly Shanahan, M.D., E. Jane Costello, M.D., Adrian Angold, M.R.C.Psych.

Objective: No longitudinal studies beginning in childhood have estimated the cumulative prevalence of psychiatric illness from childhood into young adulthood. The objective of this study was to estimate the cumulative prevalence of psychiatric disorders by young adulthood and to assess how inclusion of not otherwise specified diagnoses affects cumulative prevalence estimates.

Method: The prospective, population-based Great Smoky Mountains Study assessed 1,420 participants up to nine times from age 9 through 21 years of age from 11 counties in the southeastern United States. Common psychiatric disorders were assessed in childhood and adolescence (ages 9 to 16 years) with the Child and Adolescent Psychiatric Assessment and in young adulthood (ages 19 and 21 years) with the Young Adult Psychiatric Assessment. Cumulative prevalence estimates were derived from multiple imputations. Results. By 21 years of age, 61.1% of participants met criteria for at least one psychiatric disorder. An additional 4% met criteria for a not otherwise specified disorder only, increasing the total cumulative prevalence for any disorder to 65.5%. Male subjects had higher rates of substance and disruptive behavior disorders compared with female subjects; therefore, they were more likely to meet criteria for a well-specified disorder (67.8% vs 56.7%) or any disorder (89.1% vs 77.8%). Children with a not otherwise specified disorder only were at increased risk for a well-specified young adult disorder compared with children with no disorder in childhood. Conclusions: Only a small percentage of young people meet criteria for a DSM disorder at any given time, but most do by young adulthood. As with other medical illness, psychiatric illness is a nearly universal experience. J. Am. Acad. Child Adolesc. Psychiatry, 2011;50(3):252-261. Key Words: epidemiology, prevalence, not otherwise specified disorders, psychiatric disorders.
Figure 8

A

Number of 10-24-year-olds (millions)

NCD predominant  681 million
Injury excess  219 million
Multi-burden  917 million

B

Total DALYs (millions)

NCD predominant  67.8 million
Injury excess  28.8 million
Multi-burden  165 million
“The transition to adulthood is poorly understood in spite of the fact that it is probably the age period when most adult disorders have their peak rates of incidence”

Mrazek & Haggerty, 1994
Institute of Medicine
The Global Burden of Disease
Orygen has been a global pioneer in early intervention and working with 12–25 year-olds. This age is when 75% of all mental diseases occur.

Global Burden of Disease:
#1 Health Issue for Young People

Diagram showing the annual incidence of physical and mental illnesses per 1,000 people by age.
Figure 6: Severity of mental disorders experienced by 4-17 year-olds in the past 12 months by age group.
Young people don’t seek or get professional help!!

Only 13% of young men and 31% of young women access professional mental health care

Young men aged 16-24 have the lowest professional help-seeking of any age group
Burden of psychiatric disorder in young adulthood and life outcomes at age 30
Sheree J. Gibb, David M. Fergusson and L. John Horwood

Background
Psychiatric disorders are common during young adulthood and comorbidity is frequent. Individual psychiatric disorders have been shown to be associated with negative economic and educational outcomes, but few studies have addressed the relationship between the total extent of psychiatric disorder and life outcomes.

Aims
To examine whether the extent of common psychiatric disorder between ages 18 and 25 is associated with negative economic and educational outcomes at age 30, before and after controlling for confounding factors.

Method
Participants were 987 individuals from the Christchurch Health and Development Study, a longitudinal study of a birth cohort of individuals born in Christchurch, New Zealand, in 1977 and followed to age 30. Linear and logistic regression models were used to examine the associations between psychiatric disorder from age 18 to 25 and workforce participation, income and living standards, and educational achievement at age 30, before and after adjustment for confounding factors.

Results
There were significant associations between the extent of psychiatric disorder reported between ages 18 and 25 and all of the outcome measures (all $P<0.05$). After adjustment for confounding factors, the associations between psychiatric disorder and workforce participation, income and living standards remained significant (all $P<0.05$), but the associations between psychiatric disorder and educational achievement were not significant (all $P>0.10$).

Conclusions
After due allowance had been made for a range of confounding factors, psychiatric disorder between ages 18 and 25 was associated with reduced workforce participation, lower income and lower economic living standards at age 30.

Declaration of interest
None.
CLINICAL STAGING PRECISION MEDICINE AND PERSONALISED CARE

DIAGNOSIS WITH UTILITY
Research Domain Criteria (RDoC)

Commentary

Research Domain Criteria (RDoC): Toward a New Classification Framework for Research on Mental Disorders

Current versions of the DSM and ICD have facilitated reliable clinical diagnosis and research. However, problems have increasingly been documented over the past several years, both in clinical and research arenas (e.g., 1, 2). Diagnostic categories based on clinical consensus fail to align with findings emerging from clinical neuroscience and genetics. The boundaries of these categories have not been predictive of treatment response. And, perhaps most important, these categories, based upon presenting signs and symptoms, may not capture fundamental underlying mechanisms of dysfunction. One consequence has been to slow the development of new treatments targeted to underlying pathophysiological mechanisms.

History shows that predictable problems arise with early, descriptive diagnostic systems designed without an accurate understanding of pathophysiology. Throughout medicine, disorders once considered unitary based on clinical presentation have been shown to be heterogeneous by laboratory tests—e.g., destruction of islet cells versus insulin resistance in distinct forms of diabetes mellitus. From infectious diseases to subtypes of cancer, we routinely use biomarkers to direct distinct treatments. Conversely, history also shows that syndromes appearing clinically distinct may result from the same etiology, as in the diverse clinical presentations following syphilis or a range of streptococcus-related disorders.

While the potential advantages of a neuroscience-based approach to psychiatric classification are

“Our expectation... is that identifying syndromes based on pathophysiology will eventually be able to improve outcomes.”

NIHM Research Domain Criteria (RDoC)

- Background
- Method
- RDoC Matrix
- Example Studies
- Developmental and Environmental Aspects
- Discussion
- Process and Final Product

Draft v3: May, 2018

Over the past several decades, an increasingly comprehensive body of research in genetics, neuroscience, and behavioral sciences has transformed our understanding of how the brain produces adaptive behavior and the ways in which normal functioning becomes disrupted in various forms of mental disorders. In order to speed the translation of this new knowledge to clinical issues, the NIH included in its new strategic plan Strategy 1.d: “Develop, for research purposes, new ways of classifying mental disorders based on dimensions of observable behavior and neurobiological measures.” (For the full text, see http://www.nih.gov/aboutstrategic-planning-reports/index.htm#strategic-objectives). The implementation of this strategy has been named the Research Domain Criteria Project (RDoC). The purpose of this document is to describe the RDoC project in order to acquaint the field with its nature and direction, and to facilitate commentary from scientists and other interested stakeholders regarding both general and specific aspects of the RDoC
The Development of Ideas and Conceptual Frameworks

COMMENTARY

Early Clinical Phenotypes, Clinical Staging, and Strategic Biomarker Research: Building Blocks for Personalized Psychiatry

Patrick McGorry, Jim Meaney

Redeeming diagnosis in psychiatry: timing versus specificity

Patrick McGorry, Jim Meaney

In general medicine, diagnosis is a crucial step in the choice of appropriate treatment, prediction of the future course of an illness, education of patients and families, and helps patients to realise that they are not alone. By contrast, in psychiatry, attitudes to diagnosis remain mixed and polarised, and the value of diagnosis is continuously questioned. With revisions to the international diagnostic systems for psychiatry on the horizon, this deep ambivalence—derived from Cartesian tensions between “mixed” and “brainless” perspectives—has surfaced once again, breathing new life into an enduring culture war. How can this impasse be overcome? What is diagnosis actually about?

Essentially, diagnosis is classification with utility. The aim is to characterise the clinical phenotype in a condensed or shorthand way that helps to distinguish people who are ill and in need of health care from those who are not, and to genuinely improve selection of treatment and prediction of outcomes. Utility in medicine is the ultimate test, and this utilitarian definition is necessary and sufficient to justify the diagnosis strategy in clinical practice. Value might be added to a diagnosis if little more than incremental and slow expected in the forthcoming new revision of the International Classification of Diseases are increasingly buffeted by the forces of politics and ideology. A transformation is it feasible?

Mental ill health has to start somewhere. Colleagues described how symptoms in intensification of subjective experiences that have been present for some time or of new experiences or behaviours, or from a combination of both. Human experience periodic and sometimes intense and may affect and influence in response to the event. When these changes become more they can be discerned as so-called ‘sustained phenotypes’, which wax and wane, intensify or become confluent, and might move towards pure or hybrid macrophenotypes. A method to identify and classify these dimensions of psychopathology can be easily identified, such as subscale prevalence and effectiveness.

Editorial

As the American Psychiatric Association committee begins formal work on DSM-V, we welcome brief editorials on issues that should be considered in its formulation.

Issues for DSM-V: Clinical Staging: A Heuristic Pathway to Valid Nosology and Safer, More Effective Treatment in Psychiatry

Clinical staging is a proven strategy whose value is clear in the treatment of malignancies and many other medical conditions in which the quality of life and survival rely on the earliest possible delivery of effective interventions, yet it has not been explicitly endorsed in psychiatry (1–4). Clinical staging differs from conventional diagnostic practice in that it defines the progression of disease in time and where a person lies along this continuum of the course of illness. It enables the clinician to select treatments relevant to earlier stages because such interventions are effective.
Clinical staging in psychiatry: a cross-cutting model of diagnosis with heuristic and practical value

Jan Scott, Marion Leboyer, Ian Hickie, Michael Berk, Ravi Kapczinski, Ellen Frank, David Kupfer and Patrick McGorry

Summary
Staging models are used routinely in general medicine for potentially serious or chronic physical disorders such as diabetes, arthritis and cancers, describing the links between biomarkers, clinical phenotypes and disease extension, and promoting a personalised or stratified medicine approach to treatment planning. Clinical staging involves a detailed description of where an individual exists on a continuum of disorder progression from stage 0 (e.g. at-risk or latency stage through to stage IV (late or end-stage disease). The approach is popular owing to its clinical utility and is increasingly being applied in psychiatry. The concept offers an informed approach to research and the active promotion of indicated prevention and early intervention strategies. We suggest that for young persons with emerging bipolar disorder, such transdiagnostic staging models could provide a framework that better reflects the developmental psychopathology and matches the complex longitudinal inter-relationships between subsyndromal and syndromal mood, psychotic and other disorders.

Declaration of interest
None.

Clinical Staging: A Heuristic and Practical Strategy for New Research and Better Health and Social Outcomes for Psychotic and Related Mood Disorders

Patrick D McGorry, MD, PhD, FRCp, FRANZCP; Barnaby Nelson, MPsych (Clin), PhD; Sherrilyn Goldstone, PhD; Alston R Yung, MD, MPH, FRANZCP

Most mental illnesses emerge during adolescence and early adulthood, with considerable associated disabilities and lifetime losses during this critical developmental phase. Our current diagnostic system lacks therapeutic validity, particularly for the early stages of mental disorders when symptoms are emerging and interlying and have not yet stabilised sufficiently to fit the existing syndromal criteria. While this is, in part, due to the difficulty of distinguishing between developmental or normative changes from the early symptoms of persistent and disabling mental illness, these factors have contributed to a growing movement for the reform of our current diagnostic system to more adequately inform the choice of therapeutic strategy, particularly in the early stages of a mental illness. The clinical staging model, which defines not only the extent of progression of a disorder at a particular point in time but also where a person lies currently along the continuum of the course of an illness, is particularly useful as it differentiates early, mild clinical phenomena from those that accompany illness progression and chronicity. This will not only enable clinicians to select treatments relevant to earlier stages of an illness, where such interventions are likely to be more effective and less harmful than treatments directed later in the course of illness, but also allows a more efficient integration of our rapidly expanding knowledge of the biological, social, and psychological vulnerability factors involved in the development of mental illness into a useful diagnostic framework.


EXPERT REVIEW
All the world’s a (clinical) stage: rethinking bipolar disorder from a longitudinal perspective

E Frank, VL Nimgaonkar, ML Phillips and DJ Kupfer

Psychiatric disorders have traditionally been classified using a static, categorical approach. However, this approach falls short in facilitating understanding of the development, common comorbid diagnoses, progression and treatment of these disorders. We propose a staging model of bipolar disorder that integrates genetic and neural information with mood and activity symptoms to describe how the disease progresses over time. From an early, asymptomatic, but ‘at-risk’ stage to severe, chronic illness, each stage is characterised with associated neuroimaging findings as well as strategies for mapping genetic risk factors. Integrating more biologic information relating to cardiovascular and endocrine systems, refining methodology for modeling dimensional approaches to disease and developing outcome measures will all be crucial in examining the validity of this model. Ultimately, this approach should aid in developing targeted interventions for each group that will reduce the significant morbidity and mortality associated with bipolar disorder.

Molecular Psychiatry. advance online publication. 22 July 2014; doi:10.1038/mp.2014.71

Clinical staging for mental disorders: a new development in diagnostic practice in mental health

Matching the timing and intensity of interventions to the specific needs of patients

The release of the fifth edition of the Diagnostic and statistical manual of mental disorders (DSM-5) classification system, scheduled for May 2013, will create controversy due to the expanded range of problems now classed as mental disorders. However, in our view, it is unlikely to improve clinical care. The ultimate test for any system of diagnosis is its clinical utility. That is, does it assist clinicians to improve their selection or sequencing of treatments and enable them to make more accurate major mental disorders begin between 15 and 25 years of age, a focus on enhanced care and novel clinical research during this critical developmental phase is a timely test of this framework. At its core, the clinical staging model recognises the full spectrum of illness experience. For example, for ischaemic heart disease, the staging model identifies individuals at risk (because of genetics, lifestyle or other risk factors), those with symptoms or related syndromes that suggest
Orygen’s Staging Framework of Mental Health Care

Clinical stage

0  No illness or symptoms
1a Help-seeking with symptoms
1b At risk for disorder
2  First episode of severe disorder
3  Recurring or persisting disorder
4  Ongoing and unremitting illness

Intervention framework

Universal prevention
Selective prevention
Indicated (high-risk) prevention
Early Intervention
Relapse prevention
Continuing Care
Stage 0: asymptomatic

Stage 1a: distress disorder

Stage 1b: distress disorder + sub-threshold specificity

Stage 2: first treated episode

Stage 3: recurrence or persistence

Stage 4: treatment resistance

Increasing symptom specificity and disability

Clinical Staging: Diagnostic Utility And Stepwise Care

early intervention focus

schizophrenia

bipolar disorder

depressive disorder

anxiety disorder

substance misuse
FIGURE 1. Staging Model of Causal Symptom Circuits

Stage of nonspecific mental distress

Early treatment

Stage of specific mental syndrome

Anxiety Syndrome

Mood Syndrome

Psychosis Syndrome
TRANSITIONS STUDY

Baseline (n=801)  !2 Month F/U (n=511)
Moving From Static to Dynamic Models of the Onset of Mental Disorder
A Review

JAMA Psychiatry | Review

Barnaby Nelson, PhD, Patrick D. McGorry, MD, PhD; Marieke Wickers, PhD; Johanna T. W. Wijman, PhD, Jessica A. Hartmann, PhD

IMPORTANCE In recent years, there has been increased focus on subthreshold stages of mental disorders, with attempts to model and predict which individuals will progress to full-threshold disorder. Given this research attention and the clinical significance of the issue, this article analyzes the assumptions of the theoretical models in the field.

OBSERVATIONS Psychiatric research into predicting the onset of mental disorder has shown an overreliance on one-off sampling of cross-sectional data (e.g., a snapshot of clinical state and other risk markers) and may benefit from taking dynamic changes into account in predictive modeling. Cross-disciplinary approaches to complex system structures and changes, such as dynamical systems theory, network theory, instability mechanisms, chaos theory, and catastrophe theory, offer potent models that can be applied to the emergence (or decline) of psychopathology, including psychosis prediction, as well as to transdiagnostic emergence of symptoms.

CONCLUSIONS AND RELEVANCE Psychiatric research may benefit from approaching psychopathology as a system rather than as a category, identifying dynamics of system change (e.g., abrupt vs gradual psychosis onset) and determining the factors to which these systems are most sensitive (e.g., interpersonal dynamics and neurochemical change) and the individual variability in system architecture and change. These goals can be advanced by testing hypotheses that emerge from cross-disciplinary models of complex systems. Future studies require repeated longitudinal assessment of relevant variables through either (or a combination of) micro-level (momentary and day-to-day) and macro-level (month and year) assessments. Ecological momentary assessment is a data collection technique appropriate for micro-level assessment. Relevant statistical approaches include modeling and time series analysis, including metric-based and model-based methods that draw on the mathematical principles of dynamical systems. This next generation of prediction studies may more accurately model the dynamic nature of psychopathology and system change as well as have treatment implications, such as introducing means of identifying critical periods of risk for mental state deterioration.

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<th>At Risk</th>
<th>Group</th>
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<td>CAARMS</td>
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<td>(2) Brief limited intermittent psychotic symptoms <em>and/or</em></td>
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<td>(3) Trait vulnerability for psychosis + significant recent drop in functioning or chronic low functioning</td>
<td>SOFAS &amp; FIGS</td>
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<td>AND/OR</td>
<td>(4) Sub-threshold mania <em>and/or</em></td>
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<td>SCID-5 (See Bechdolf et al.&quot; for a detailed description of ratings on SCID)</td>
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<td>disorder</td>
<td>(6) Trait vulnerability for bipolar disorder + Depression</td>
<td>SCID-5 + FIGS (See Bechdolf et al.&quot; for a detailed description of rating requirements)</td>
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<td>(7) Current moderate depression <em>and/or</em></td>
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<td>AND/OR</td>
<td>(9) Borderline Personality Features</td>
<td>SCID-5-PD (≥ 2 out of 9 borderline personality criteria, occurring ≥ 6 months)</td>
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Biomarkers and clinical staging in psychiatry

Patrick McGorry\textsuperscript{1}, Matcheri Keshavan\textsuperscript{2}, Sherilyn Goldstone\textsuperscript{1}, Paul Amminger\textsuperscript{1}, Kelly Allott\textsuperscript{1}, Michael Berk\textsuperscript{1,3}, Suzie Lavoie\textsuperscript{1}, Christos Pantelis\textsuperscript{4}, Alison Yung\textsuperscript{5}, Stephen Wood\textsuperscript{6}, Ian Hickie\textsuperscript{7}

\textsuperscript{1}Orygen Youth Health Research Centre, Centre for Youth Mental Health, Department of Psychiatry, University of Melbourne, Melbourne, Australia; \textsuperscript{2}Beth Israel Deaconess Medical Centre, Harvard Medical School, Boston, MA, USA; \textsuperscript{3}School of Medicine, Deakin University, Geelong, Australia; \textsuperscript{4}Melbourne Neuropsychiatry Centre, Department of Psychiatry, University of Melbourne, Melbourne, Australia; \textsuperscript{5}Institute of Brain, Behaviour and Mental Health, University of Manchester, Manchester, UK; \textsuperscript{6}School of Psychology, University of Birmingham, Birmingham, UK; \textsuperscript{7}Brain and Mind Research Institute, University of Sydney, Sydney, Australia

Personalized medicine is rapidly becoming a reality in today’s physical medicine. However, as yet this is largely an aspirational goal in psychiatry, despite significant advances in our understanding of the biochemical, genetic and neurobiological processes underlying major mental disorders. Preventive medicine relies on the availability of predictive tools; in psychiatry we still largely lack these. Furthermore, our current diagnostic systems, with their focus on well-established, largely chronic illness, do not support a pre-emptive, let alone a preventive, approach, since it is during the early stages of a disorder that interventions have the potential to offer the greatest benefit. Here, we present a clinical staging model for severe mental disorders and discuss examples of biological markers that have already undergone some systematic evaluation and that could be integrated into such a framework. The advantage of this model is that it explicitly considers the evolution of psychopathology during the development of a mental illness and emphasizes that progression of illness is by no means inevitable, but can be altered by providing appropriate interventions that target individual modifiable risk and protective factors. The specific goals of therapeutic intervention are therefore broadened to include the prevention of illness onset or progression, and to minimize the risk of harm associated with more complex treatment regimens. The staging model also facilitates the integration of new data on the biological, social and environmental factors that influence mental illness into our clinical and diagnostic infrastructure, which will provide a major step forward in the development of a truly pre-emptive psychiatry.

Key words: Biomarkers, clinical staging, diagnostic reform, early intervention, personalized medicine, pre-emptive psychiatry, youth mental health

(World Psychiatry 2014;13:211–223)
PERSONALISED
TRANSDIAGNOSTIC CARE

- Prediction of Risk and Need via Machine Learning and other techniques using microphenotypes and biomarkers
- Novel biotherapies: Omega 3, NAC, Taurine, CBD etc Linked to mechanisms not necessarily phenotypes or syndromes
- Psychotherapies – modernised by new technologies: VR, internet, mobile etc
- ESM plus Network Analysis to understand how to break cascades of onset psychopathology
- Expressive therapies:

  “You see, therapy is like trying to find a shoe that fits, because if it doesn’t, you will not be able to take those two steps forward.”
Atlas
CHILD AND ADOLESCENT MENTAL HEALTH RESOURCES
GLOBAL CONCERNS: IMPLICATIONS FOR THE FUTURE
2005

World Psychiatric Association
World Health Organization
International Network for Child and Adolescent Psychiatry and Allied Professions
Architecture and functioning of child and adolescent mental health services: a 28-country survey in Europe

Giulia Signorini, Swaran P Singh, Vlatka Boricevic-Marsanic, Gwen Dieleman, Katarina Dodig-Curkovic, Tomislav Franic, Suzanne E Gerritsen, James Griffin, Athanasios Maras, Fiona McNicholas, Lesley O’Hara, Diane Purper-Ouakil, Moli Paul, Ulrike Schulze, Cathy Street, Sabine Tremmery, Helena Tuomainen, Frank Verhulst, Jane Warwick, Giovanni de Girolamo, for the MILESTONE Consortium

The WHO Child and Adolescent Mental Health Atlas, published in 2005, reported that child and adolescent mental health services (CAMHS) in Europe differed substantially in their architecture and functioning. We assessed the characteristics of national CAMHS across the European Union (EU), including legal aspects of adolescent care. Using an online mapping survey aimed at expert(s) in each country, we obtained data for all 28 countries in the EU. The characteristics and activities of CAMHS (i.e., availability of services, inpatient beds, and clinicians and organisations, and delivery of specific CAMHS services and treatments) varied considerably between countries, as did funding sources and user access. Neurodevelopmental disorders were the most frequent diagnostic group (up to 81%) for people seen at CAMHS (data available from only 13 [46%] countries). 20 (70%) countries reported having an official national child and adolescent mental health policy, covering young people until their official age of transition to adulthood. The heterogeneity in resource allocation did not seem to match epidemiological burden. Substantial improvements in the planning, monitoring, and delivery of mental health services for children and adolescents are needed.
Figure 1: Number of child and adolescent mental health services per 100,000 young people in European Union countries.

Figure 2: Number of inpatient beds per 100,000 young people in European Union countries.
The Poverty of the Status Quo

The most dangerous phrase in the language is "we've always done it this way."

Orygen
The National Centre of Excellence in Youth Mental Health
Caring culture, but child culture vs youth culture?
Playdough vs hipsters
Under-resourced and under-researched
Already splits prepubertal and kids and postpubertal adolescents
Developmental focus but only some staff specifically trained in this
Problems with older clients 15 plus?
Selective and weak grip on 15 -18 year olds?
Need to expand developmental and family perspective especially to older adolescent -young adult phase
Massive bottleneck for transition
Under-resourced even for “SMI”/Schizophrenia focus
Diagnostic censor/triage
Targeting of SMI a serious problem for EI and full coverage
Minimal developmental or family expertise or commitment
Evidence base better but poor translation
Soft bigotry of low expectations
Stigmatised, often crude and still traumatic
THE NEGLECT OF ADOLESCENT PSYCHIATRY

– “It has always been a puzzle to me that the period of life of maximum disturbance, adolescence, is the one of least interest to both psychiatrists and governments....

– ....the neglect of adolescent psychiatry is a special form of self-harm undertaken by adult society.”

– John Gunn 2004
“Existing systems and structures focus almost exclusively on children or on adults, meaning few investments and interventions are directed specifically to young people.”

Melinda Gates
Inconvenience stores
Australia's youth mental health services at the bottom of the cliff to be erected here.
FROM NEGLECT THROUGH REFORM AND INVESTMENT TO BETTER OUTCOMES AND MENTAL WEALTH
Not a Safe Pair of Hands
ON THE WRONG TRACK

Process, outcome and experience of transition from child to adult mental healthcare: multiperspective study

Sue Han, P. Singh, M. Paul, T. Nowak, T. Stort, T. Kramer, T. Weiser, S. Mai, K. Holm, A. Salt, N. Belling and S. White

Background
Many adolescents with mental health problems experience transition of care from child and adolescent mental health services (CAMHS) to adult mental health services (AMHS).

Aims
As part of the TRACK study we evaluated the process, outcomes and user and carer experiences of transition from CAMHS to AMHS.

Method
We identified a cohort of service users crossing the CAMHS/AMHS boundary over a year across 64 mental health trusts in England. We traced their journey to determine predictors of optimal transition and conducted qualitative interviews with a subsample of users, their carers and clinicians on how transition was experienced.

Results
Of 156 individuals who crossed the transition boundary in 1 year, 14 were actual referrals. Of those, they made a transition to AMHS, and 14 were potential referrals (i.e., were either not referred to AMHS or not accepted by AMHS). Individuals with a history of severe mental illness, being on medication or having been admitted more likely to make a transition than those with neurodevelopmental disorders, emotional/behavioral disorders and infrequent personality disorder. Optimal transition, defined as adequate transition planning, good information transfer across teams, joint working between teams and continuity of care following transition, was experienced by less than 5% of those who made a transition. Following transition, most service users stayed engaged with AMHS and reported improvement in their mental health.

Conclusions
For the vast majority of service users, transition from CAMHS to AMHS is poorly planned, poorly executed and poorly experienced. The transition process opportunities for improving transitions between CAMHS and AMHS.

Declaration of interest
None.
A New Architecture and Culture of Care
Integrated Youth Mental Health through Enhanced Primary Care

A Global Paradigm
Primary Care – not functioning at all for YP/EA’s
Need to build a stigma free highly engaging and accessible portal with capacity for high volume and positive experiences and outcomes
AND
And an expanded specialist YMH system with capacity for more expert, mobile, intensive and longer tenure as required
One stop service for mental health, AOD, physical health, vocational assistance that is youth friendly and free or low cost
What to expect at a centre?

Centres provide service across four core streams, at a minimum;
- Physical health
- Mental health
- Alcohol and other drug services
- Vocational and educational support

Youth friendly location and centre
- Entry point for ALL young people, aged between 12-25 years
- Focus on early intervention and early help seeking
- No geographical catchment areas
- Fee structure – free, low cost or fee for service
- Co-location and integration of support services
Upscaling Youth Mental Health
Rapid growth

Number of unique Young People accessing headspace centres & eheadspace compared to number of centres established

- FY09: 11,937
- FY10: 23,965
- FY11: 23,729
- FY12: 34,496
- FY13: 38,567
- FY14: 44,987
- FY15: 50,047
- FY16: 57,854

- Centres
- eheadspace
- No of Centres Established
headspace is the National Youth Mental Health Foundation, providing early intervention mental health services to 12-25 year olds.

Between 1 July 2015 and 30 June 2016:

- More than 71,000 young people accessed a headspace centre and had over 200,000 occasions of service.
- Over 24,000 young people accessed a headspace and had over 50,000 occasions of service.
- 13 new headspace centres opened, bringing the total to 95 across Australia.
- 18.3% of young people accessing headspace centres identify as LGBTIQ.
- 8.4% of young people accessing headspace centres identify as Aboriginal and/or Torres Strait Islander.
- 8.5% of young people accessing headspace centres identify as coming from a Culturally and Linguistically Diverse background.
- An independent evaluation commissioned by the Commonwealth Government Department of Health showed headspace achieved positive improvements for young people in reducing psychological distress, days out of work or study, suicidal ideation and self-harming behaviours.

headspace School Support worked with over 1,000 Australian school communities to prepare for, respond to and recover from a suicide.

Accessible - awareness

Australian National Survey of Adolescents – 2014 (Young Minds)

Heard about headspace:

- 50.7% all parents
- 64.6% of parents of adolescent with a mental disorder
- 37.2% all 13-17 year olds
- 54.4% of adolescents with major depressive disorder
Accessible

**Centres:**
N=74,804 (2013-2015)
60% female
23% aged 12-14, 34% aged 15-17
14% LGBTIQ (vs. 1-3% population)
9% Aboriginal or Torres Strait Islander (vs. 4% population)
7% CALD (vs. 25% population)

**eheadspace:**
over 60,000 registrations, 150 yp each day
79% female
10% aged 12-14, 33% aged15-17

**School support**
- one third of all secondary schools in Australia

**Early psychosis program**
55% male (preliminary data)
Appropriate

PRESENTING TO THE CENTRE
Young people presented to the centre with these issues...

- **DEPRESSION** 28%
- **PHYSICAL/SEXUAL HEALTH** 7%
- **SITUATIONAL**
  - home conflict – relationships – bullying – homelessness – 23%
- **OTHER MENTAL ISSUES** 13%
- **ANXIETY** 22%
- **ALCOHOL & OTHER DRUGS** 3%
- **WORK & STUDY** 2%
- **OTHER** 2%
Stage of illness

- Stage 0: No symptoms of mental disorder
- Stage 1a: Mild to moderate general symptoms
- Stage 1b: Sub-threshold diagnosis
- Stage 2: Threshold diagnosis
- Stage 3: Periods of remission
- Stage 4: Ongoing severe symptoms

Per cent

April 2013 – March 2015

Appropriate headspace centres

Not applicable
Effective

April 2013 – March 2015

K10 (N=26,171)

SOFAS (N=34,635)
Impact of headspace

The independent evaluation of headspace7 stated that if headspace did not exist:

“large numbers of young people would not access services or would access them at a much later stage in the development of their disorders, potentially incurring significant costs to the government as well as difficulties for the young people and their families”
Adolescent mental health

Cultures for mental health care of young people: an Australian blueprint for reform

Patrick D McGorry, Sherilyn D Goldstone, Alexandra G Parker, Debra J Rickwood, Ian B Hickie

Mental ill-health is now the most important health issue facing young people worldwide. It is the leading cause of disability in people aged between 10 and 24 years, contributing 45% of the overall burden of disease in this age-group. Despite their manifest need, young people have the lowest rates of access to mental health care, largely as a result of poor awareness and help-seeking, structural and cultural flaws within the existing care systems, and the failure of
headspace — Australia’s innovation in youth mental health: who are the clients and why are they presenting?

headspace National Youth Mental Health Foundation is the Australian Government’s major investment in the area of youth mental health. The National Survey of Mental Health and Wellbeing (NSMHW) revealed that one in four young people experience a clinically relevant mental health problem within any 12-month period, compared with one in five in the general population. Half of a cohort of young people were shown to suffer diagnosable mental ill health at some point during the transition from childhood to adulthood, which reduces fulfilment of their potential and increases likelihood of disability and premature death. Australian data are consistent with international trends and the adolescent and early adult years are periods of peak prevalence and incidence for most mental disorders. Yet, despite having the highest prevalence, young people have the lowest level of professional help seeking for behalf of a local partnership of organisations responsible for the delivery of services, comprising mental health, alcohol and other drugs, primary care, and school health services. This comprised data from 21,274 clients across the 55 current headspace centres between 1 January and 30 June 2013.

Abstract

Objectives: To provide the first national profile of the characteristics of young people (aged 12-25 years) accessing headspace centre services — the Australian Government’s innovation in youth mental health service delivery — and investigate whether headspace is providing early service access for adolescents and young adults with emerging mental health problems.

Design and participants: Census of all young people accessing a headspace centre across the national network of 55 centres comprising a total of 21,274 headspace clients between 1 January and 30 June 2013.

Main outcome measures: Reason for presentation, Kessler Psychological Distress Scale, stage of illness, diagnosis, functioning.

Results: Young people were most likely to present with mood and anxiety symptoms and disorders, self-reporting their reason for attendance as problems with how they felt. Client demographic characteristics tended to reflect population-level distributions, although clients from regional areas and of Aboriginal and Torres Strait Islander background were particularly well represented, whereas those who were born outside Australia were underrepresented.

Conclusion: headspace centres are providing a point of service access for young Australians with high levels of psychological distress and need for care in the early stages of the development of mental disorder.
The services provided to young people by *headspace* centres in Australia

*headspace*, the National Youth Mental Health Foundation, was initiated by the Australian Government in 2006 because it was recognised that the prevalence of mental disorders and the burden of disease associated with mental health problems was greater for those in their adolescent and early adult years than in older adults, but that young people were less likely to access professional help. *headspace* centres aim to be highly accessible, youth-friendly integrated service hubs that respond to the mental health, general health, alcohol and other drug, and vocational concerns of young people aged 12 to 25 years. The main goal is to improve mental health outcomes by reducing help-seeking barriers and facilitating early access to services that meet the holistic needs of young people.

### Abstract

**Objectives:** To describe the services provided to young people aged 12–25 years who attend *headspace* centres across Australia, and how these services are being delivered.

**Design:** A census of *headspace* clients commencing an episode of care between 1 April 2013 and 31 March 2014.

**Participants:** All young people first attending one of the 55 fully established *headspace* centres during the data collection period (33,038 young people).

**Main outcome measures:** Main reason for presentation, wait time, service type, service provider type, funding stream.

**Results:** Most young people presented for mental health problems and situational problems (such as bullying or relationship problems); most of those who presented for other problems also received mental health care services as needed. Wait time for the first appointment was 2 weeks or less for 80.1% of clients; only 5.3% waited for more than 4 weeks. The main services provided were a mixture of intake and assessment and mental health care, provided mainly by psychologists, intake workers and allied mental health workers. These were generally funded by the *headspace* grant and the Medicare Benefits Schedule.

**Conclusions:** *headspace* centres are providing direct and indirect access to mental health care for young people.
Changes in psychological distress and psychosocial functioning in young people accessing headspace centres for mental health problems

Abstract

Objectives: To examine changes in psychological distress and psychosocial functioning in young people presenting to headspace centres across Australia for mental health problems.

Design: Analysis of routine data collected from headspace clients who had commenced an episode of care between 1 April 2013 and 31 March 2014, and at 90-day follow-up.

Participants: A total of 24,034 people aged 12–25 years who had first presented to one of the 55 fully established headspace centres for mental health problems during the data collection period.

Main outcome measures: Main reason for presentation, types of therapeutic services provided, Kessler Psychological Distress Scale (K10) scores, and Social and Occupational Functioning Assessment Scale (SOFAS) scores.

Results: Most headspace mental health clients presented with symptoms of depression and anxiety and were likely to receive cognitive behaviour therapy (CBT). Younger males were more likely than other age- and sex-defined groups to present for anger and behavioural problems, while younger females were more likely to present for deliberate self-harm. From presentation to last assessment, over one-third of clients had significant improvements in psychological distress (K10) and a similar proportion in psychosocial functioning (SOFAS). Sixty per cent of clients showed significant improvement on one or both measures.

Conclusions: Data regarding outcomes for young people using mental health care services similar to headspace centres are scarce, but the current results compare favourably with those reported overseas, and show positive outcomes for young people using headspace centres.
Specialist Expertise

- PSYCHOSIS
- MOOD
- PERSONALITY DISORDERS
- EATING DISORDERS
- SUBSTANCE USE DISORDERS
Early Psychosis National Rollout

Cluster Locations and hYEPP Service Commencement

South East Melbourne (VIC) (July 2013)
- Elsternwick/Bentleigh Hub – Sept 2014
- Frankston Spoke – April 2015
- Dandenong Spoke – April 2015
- Narre Warren Spoke – April 2015

Western Sydney (NSW)
- Mt Druitt/Blacktown Hub – Sept 2014
- Parramatta Spoke – Sept 2014
- Penrith Spoke – Sept 2014

South East Queensland (QLD)
- Southport Hub – Nov 2014
- Meadowbrook Spoke – Feb 2015

North Perth (WA)
- Joondalup Hub – Jan 2015
- Osborne Park Spoke – Jan 2015
- Midland Spoke – Jan 2015

Darwin Hub (NT) – April 2015

Adelaide (SA)
- Adelaide Hub – Nov 2015
- Adelaide Spoke – TBC

Canberra (ACT) – TBC

Hobart Hub (TAS) – TBC

Ninth Cluster – TBC
- Ninth Hub
- Ninth Spoke
RANZCP SPECIAL INTEREST GROUP FOR YOUTH MENTAL HEALTH
TRANSFORMATIONAL CHANGE

“If you come to a fork in the road, take it”

Yogi Berra
**Strategy**

**Program 1.** Act as an innovation and service development hub for young people’s mental health to transform the quality and effectiveness of mental health supports for young Australians

**Clinical laboratory**
Develop, pilot and evaluate new treatments

**Knowledge transfer**
Provide service development & training programs

**New models of care**
of proven effectiveness

**Supportive policy**
Reform plan addressing leadership, funding, access, skills and standards.

**Workforce development**
Greater confidence, skills & availability of workforce

**Political will**
Vocal community demand for action & support for evidence based models of care

**Common platform for action**
amongst key health and social organisations

**Mobilisation**
Support grassroots advocacy for mental health reform.

**Media**
Create and shape media opportunities to inform the public about mental health reform

**Analysis**
Articulate a compelling, evidence based vision of mental health reform

**Relationships**
Develop and maintain relationships with key decision makers and influencers

**2020 impact:**
All Australian communities will have access to the knowledge, skills and services necessary to support their young people through periods of mental ill-health

Quality holistic youth mental health services are available in more Australian communities

Less stigma and more supportive environments

Increasing awareness that recovery is possible

Young people get help

More young people look for help

Young lives improve

New models of care of proven effectiveness

Program 2. Engage in thought leadership and advocacy to achieve supportive policy settings and enhanced community awareness and behaviors.
Growing Movement For Reform In Youth Mental Health

Youth Mental Health Public Forum 29/06/04
Headstrong & Jigsaw Services
HEADSPACE DENMARK
TRANSFORMING YOUTH MENTAL HEALTH CARE IN CANADA
Located on Granville Street in downtown Vancouver, the Granville Youth Health Centre offers a “one-stop” storefront for youth.
Three new clinics for youth mental health are ‘one-stop shop’

CAMH and partners to launch new services to address gaps in youth mental health care

TORONTO, June 8, 2016 – Among youth, the prevalence of mental health and addiction disorders is as high as 20 per cent. Yet as few as one in six affected youth will access appropriate treatment. Three new clinics geared to youth aged 11 to 25 will soon open their doors, offering a range of services on a walk-in basis, including brief solution-focused therapy, peer support, system navigation, access to Internet-based tools, and onsite access to psychiatric services.

“These clinics will be a one-stop shop, providing immediate access to evidence-based mental health care in the community,” says Dr. Peter Szatmari, Chief of the Child and Youth Mental Health Collaborative at CAMH, SickKids, and the University of Toronto. “By co-locating service providers from hospital, primary care and community agencies in a youth-friendly setting we can better address barriers that are most apparent for youth.”
European Conference on
YOUTH MENTAL HEALTH:
FROM CONTINUITY
OF PSYCHOPATHOLOGY TO CONTINUITY OF CARE
(STraMeHS)

16-18 DECEMBER
2014
VENICE
SAN SERVOLO CONGRESS CENTRE ITALY
Vision for Youth Mental Health

“In 2020 young people in all communities will have access to the knowledge, skills and services necessary to respond to, and support them in periods of mental ill-health”
The International Declaration on Youth Mental Health

A shared vision, principles and action plan for mental health service provision for young people aged 12–25 years

Imagine a world where...

- Every young person has a meaningful life and can fulfil their hopes and dreams
- All young people are respected, valued and supported by their families, friends and communities
- Young people feel empowered to exercise their right to participate in decisions that affect them
- Young people with mental ill-health get the support and care they need when and where they need it
- No young person with mental ill-health has to endure stigma, prejudice and discrimination
- The role of family and friends in supporting young people is valued and encouraged

10-year targets

1. Suicide rates for young people aged 12–25 years will have reduced by a minimum of 50% over the next ten years. This minimum target means that we do not accept that the death of any young person by suicide is inevitable.

2. Every young person will be educated in ways to stay mentally healthy, will be able to recognise signs of mental health difficulties and will know how to access mental health support if they need it.

3. Youth mental health training will be a standard curriculum component of all health, youth and social care training programmes.

4. All primary care services will use youth mental health assessment and intervention protocols

5. All young people and their families or carers will be able to

Why an International Declaration on Youth Mental Health?

"International declarations that articulate core values, goals and standards have played an important role in enhancing the quality of care in a number of areas of medicine."

(Bernabé & McGlarry 2005)

The World Health Organization
Future-Proofing Youth Mental Health

24th to 26th Sept 2017
DoubleTree by Hilton Hotel, Dublin

4TH INTERNATIONAL CONFERENCE ON YOUTH MENTAL HEALTH

The Long Room, Trinity College, Dublin
Recommendations

1. The public health issue is huge and society should not be sold short through band-aid changes.
2. Fundamental reform is essential, overdue and possible.
3. Unlike any other area of health reform this one is an investment not a cost.
4. Enhanced Primary Care = essential template (WHO) BUT with Young People and Families centrally involved.
5. MVP products already exist and can be built in many places.
6. Restrict “TRANSITION” to the developmental task not to service transitions.
7. Service transitions must be soft ones and flexible.
9. Full consensus not always possible: seeking it at all costs slows reform: Role for Child and Adolescent Psychiatry.....
10. International synergy and cooperation crucial.
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