BMC Youth Model Seminar #1:

A highly personalised and measurement-based model of care to manage youth mental health

Presented by

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THE UNIVERSITY OF SYDNEY

Acknowledgements

- Of country
- Of lived experience

BMC Youth Model of Care – Seminar Series

1. A highly personalised and measurement-based model of care to manage youth mental health
2. Combining clinical stage and pathophysiological mechanisms to understand illness trajectories in young people
3. A comprehensive assessment framework for youth mental health care
4. Using the BMC Youth Model to personalise care options – best care, first time!
5. A youth mental health service delivery model to support highly personalised and measurement-based care
6. Maximising the use of digiHealth solutions in youth mental health care

Outline for Seminar #1

- Mental ill-health in young people – implications to adulthood
- Current limitations in mental disorder diagnostic system when applied to young people
- Introduction to Brain and Mind Centre (BMC) Youth Model – a new model of care to promote better (highly personalised and measurement-based) care for young people
- Multidimensional needs/ outcomes in youth mental health care and **why** it is important to adopt the BMC Youth Model into clinical practice
- Right care, first time!

Interview: A/ Professor Elizabeth Scott

- Speaking from your own clinical experience, why is it so important that we adopt the BMC Youth Model into clinical practice?

Transition to major mental disorders

Tests the assumption of differential risk of progression

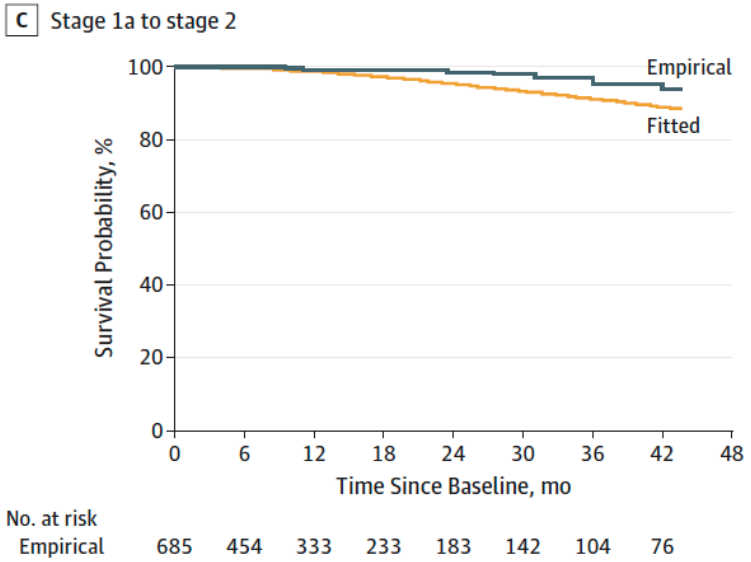
Research

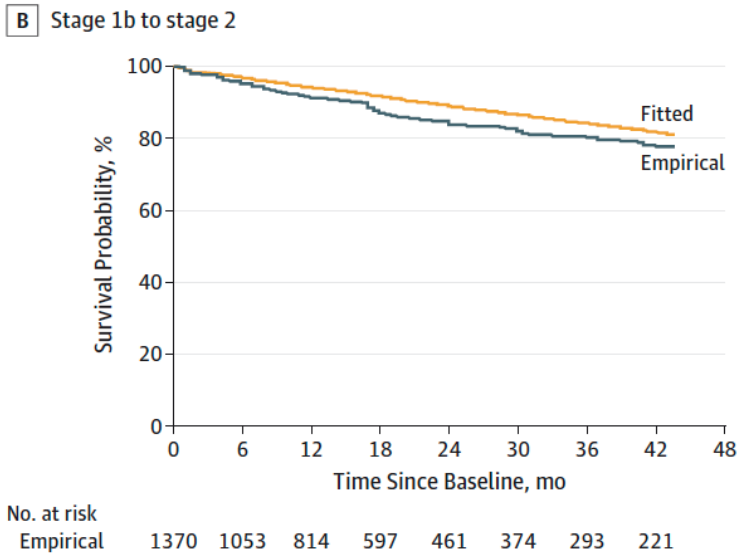
JAMA Psychiatry | Original Investigation

Clinical Stage Transitions in Persons Aged 12 to 25 Years Presenting to Early Intervention Mental Health Services With Anxiety, Mood, and Psychotic Disorders

Frank Iorfino, PhD; Elizabeth M. Scott, MD, FRANZCP; Joanne S. Carpenter, PhD; Shane P. Cross, PhD; Daniel F. Hermens, PhD; Madhura Killedar, PhD; Alissa Nichles, PGDipAppPsy; Natalia Zmicerevska, MCouns; Django White, BLaS (Stats); Adam J. Guastella, PhD; Jan Scott, PhD, FRCPsych; Patrick D. McGorry, MD, PhD, FRCP, FRANZCP; Ian B. Hickie, MD, FRANZCP, FASSA

N=2254; mean age = 18.18 (3.33); 59% female





Transitions to stage 2 - 3% of stage 1a vs 13% of stage 1b ($\chi^2(1)=55.78$, $P<0.001$)

Predictors of key transitions

Examined key sociodemographic and clinical predictors of transitions

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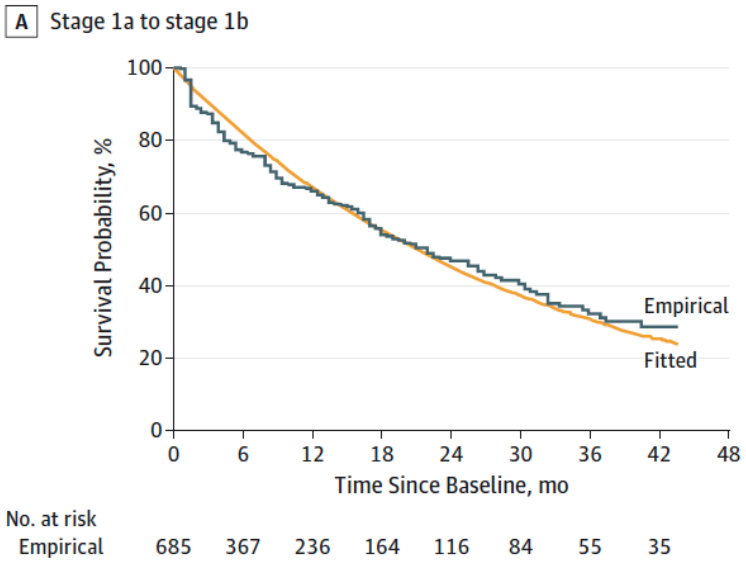
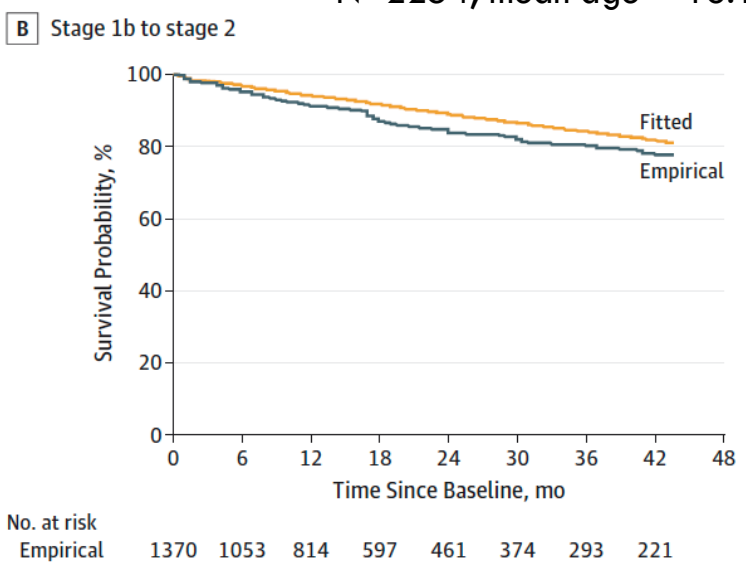




Key predictors

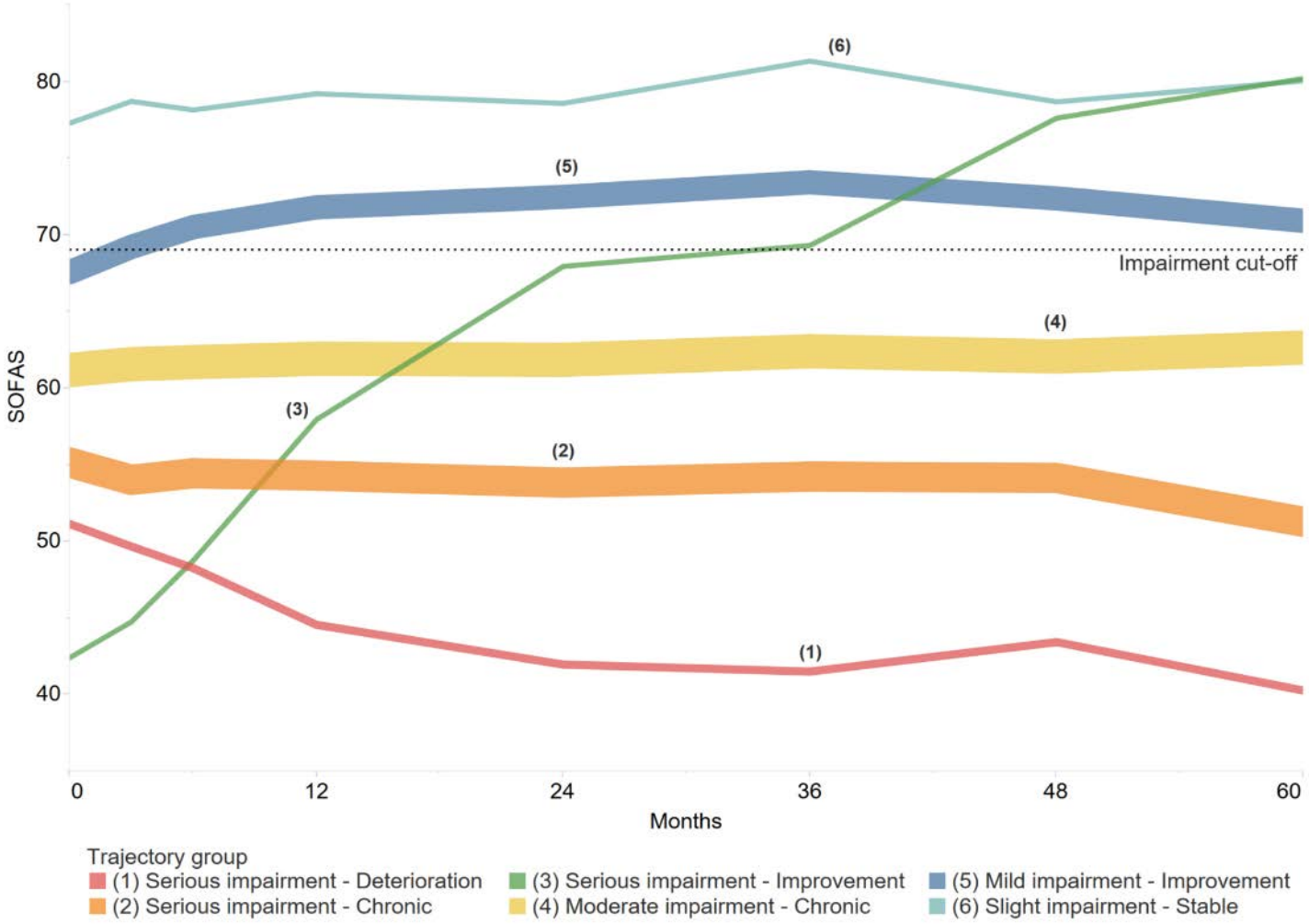
Older age	1.27* (1.11-1.46)
Lower SOFAS score	0.78* (0.67-0.90)
Manic-like experiences	2.06* (1.16-3.65)
Psychotic-like experiences	2.15* (1.40-3.31)
Circadian disturbance	1.60* (1.02-2.52)
No ADHD	0.44* (0.24-0.79)
Self-harm	1.42* (1.01-2.00)

Key predictors

Older age	1.24* (1.05-1.45)
Psychotic-like experiences	2.31* (1.65-3.23)
Circadian disturbance	1.65* (1.17-2.35)
Any childhood disorder	1.62* (1.04-2.55)
Any psychiatric medication	1.43* (1.04-1.99)

Long-term functional outcomes

Well established and persistent impairment is common



Open Access Research

BMJ Open

Delineating the trajectories of social and occupational functioning of young people attending early intervention mental health services in Australia: a longitudinal study

Frank Iorfino,[1] Daniel F Hermens,[1,2] Shane, PM Cross,[1] Natalia Zmicerevska,[1] Alissa Nichles,[1] Caro-Anne Badcock,[3] Josine Groot,[1] Elizabeth M Scott,[1] Ian B Hickie[1]

Functional outcome trajectories over 5-years

15% (79/538) reliably deteriorate
23% (122/538) reliably improve
62% (337/538) do not change

Increase access to targeted adjunctive interventions (individual placement support)

Determining when to adopt these intervention strategies and for whom, is critical, yet challenging (ie. huge individual variability)
→ potential use for technology

Suicide attempts and long-term vulnerability

These behaviours are not only a determinant of immediate distress, but also a predictor of later onset of more severe illness and comorbidity

Journal of Affective Disorders 238 (2018) 563–569

Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad

Research paper

Prior suicide attempts predict worse clinical and functional outcomes in young people attending a mental health service

Frank Iorfino[a,*], Daniel F. Hermens[a,b], Shane P.M. Cross[a], Natalia Zmicerevska[a], Alissa Nichles[a], Josine Groot[a], Adam J. Guastella[a], Elizabeth M. Scott[a], Ian B. Hickie[a]

[a] Brain and Mind Centre, University of Sydney, 94 Mallet Street, Camperdown, Sydney, NSW, Australia
[b] Sunshine Coast Mind and Neuroscience Thompson Institute, University of the Sunshine Coast, Birtinya, Queensland, Australia

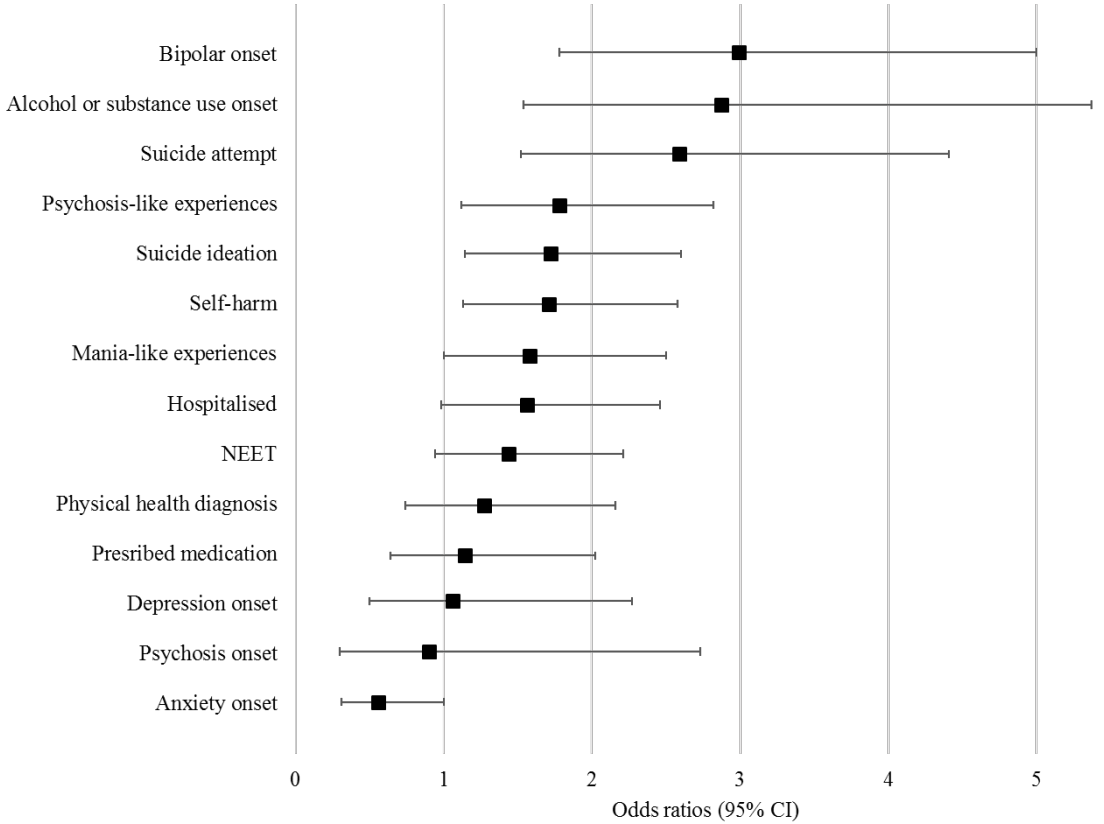
Suicide attempt history

No - 979 (86%)

Yes -164 (14%)

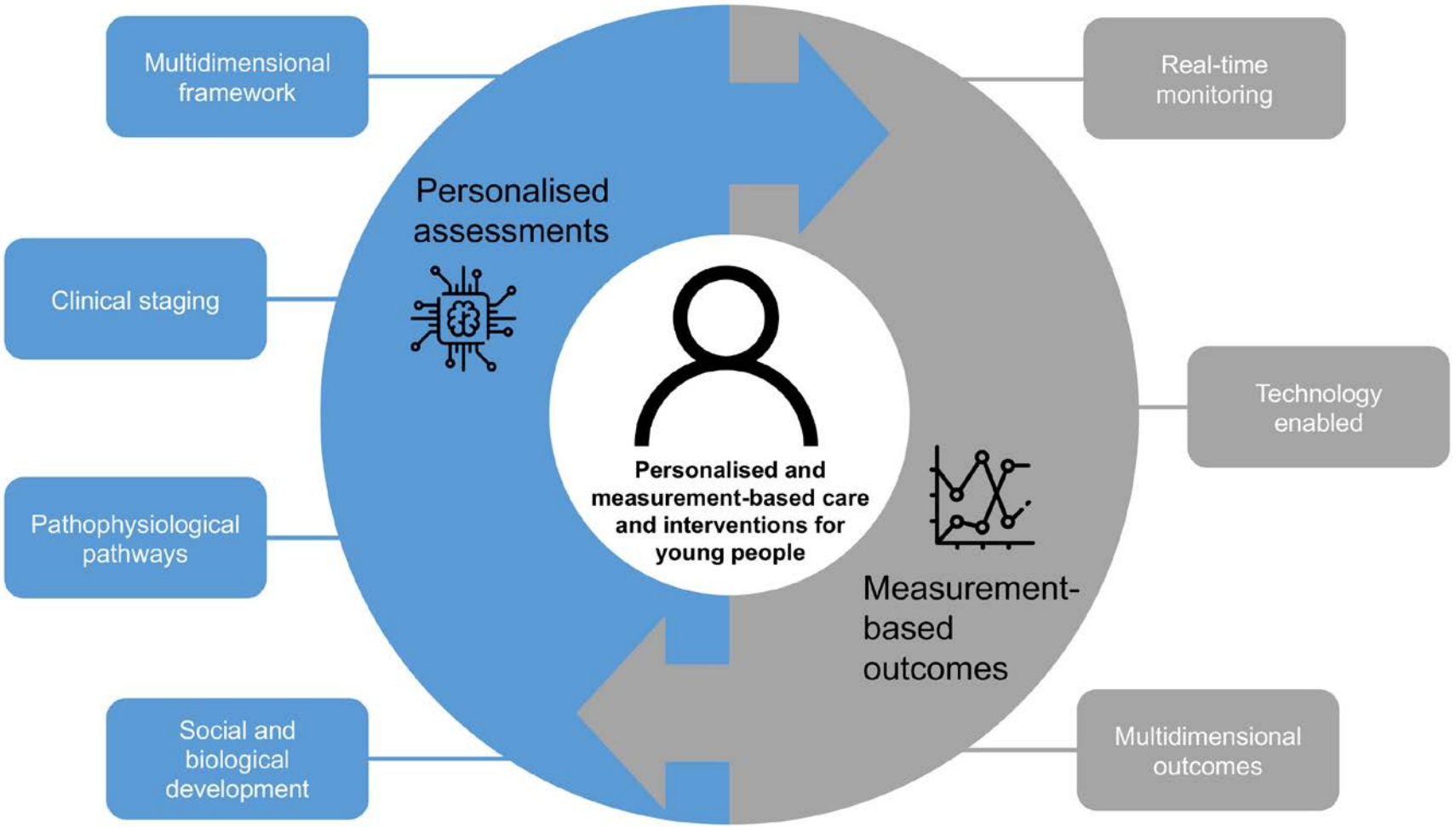
At least 4x higher than the general population (Johnston et al., 2009)

		Suicide attempt follow up		
		No	Yes	Total
Suicide attempt history at baseline	No	913 (93%)	66 (7%)	979 (100%)
	Yes	139 (85%)	25 (15%)	164 (100%)
	Total	1052 (92%)	89 (8%)	1143 (100%)



Emphasises the need for active system-level suicide prevention strategies that target suicidal thoughts and behaviours across the whole group

Med J Aust 2019; 211 (9): S1-S46. || doi: 10.5694/mja2.50383



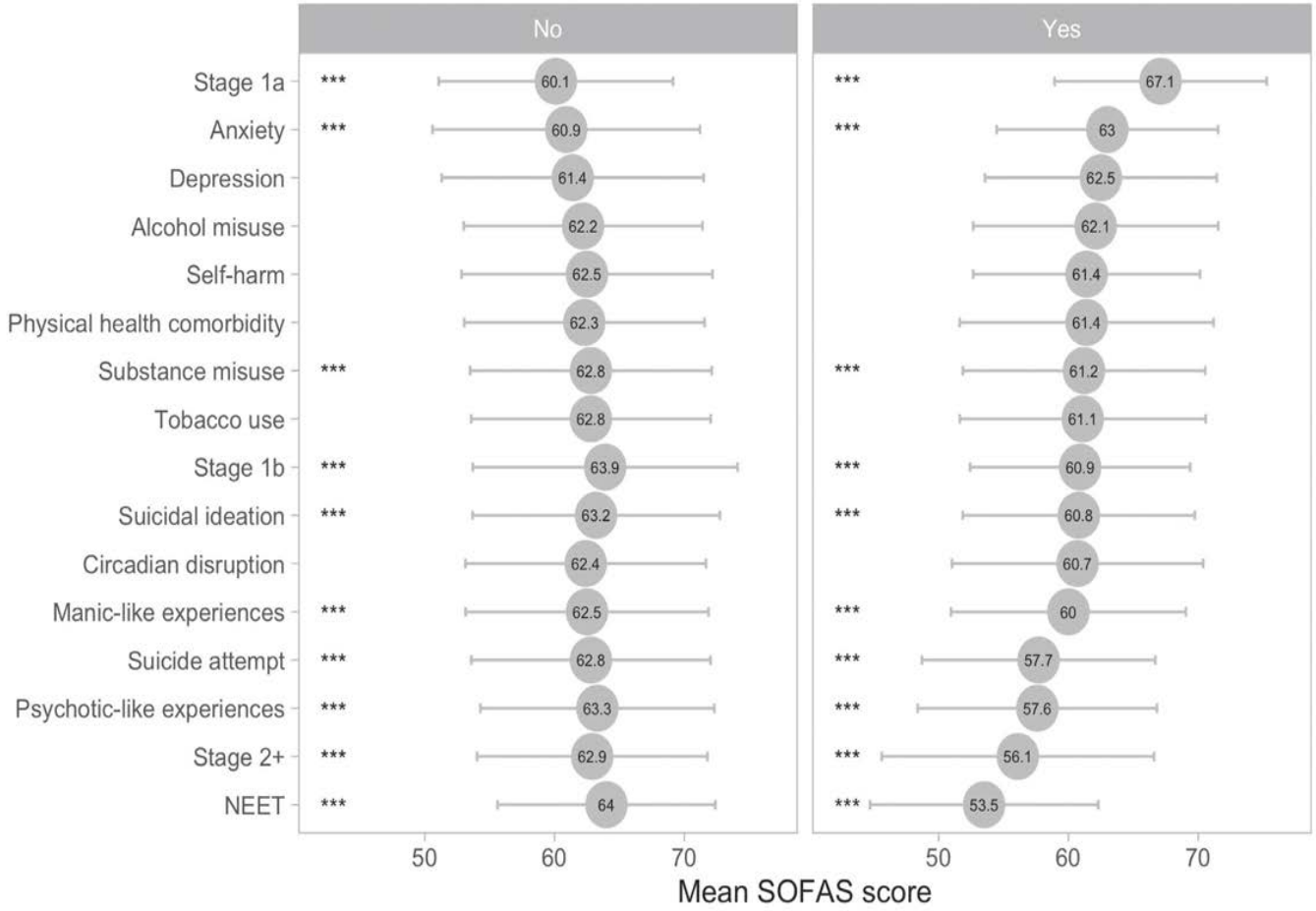
- Five key domains make up a multidimensional outcomes framework to address the specific needs of young people presenting to health services with emerging mental illness

Multidimensional outcomes framework for young people with emerging mood and psychotic syndromes

The key findings for each domain within the multidimensional outcomes framework from the Brain and Mind Centre's Optimyse Youth Cohort are shown (outer circle = domain headings; inner circles = key clinical findings)

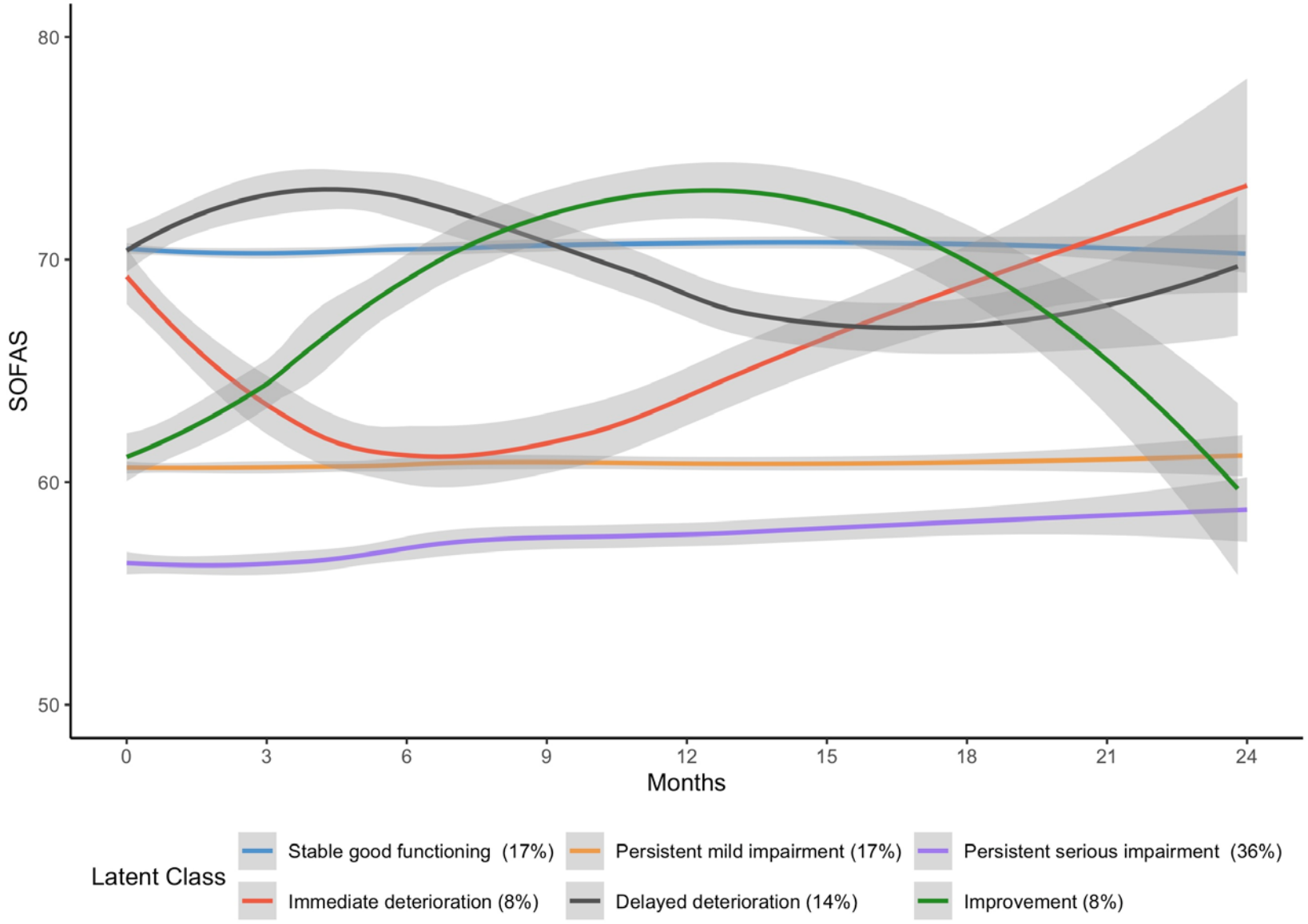
- Social and occupational function typically varies at entry into care and has a discrete relationship with each of the other key outcomes

Associations between social and occupational function and other multidimensional domains at entry to care



*Mean Social and Occupational Functional Assessment Scale (SOFAS) score for each of the other domains of the multidimensional outcome's framework are depicted (grey circles and lines = the mean and standard deviation of SOFAS score for young people who have (or do not have) the corresponding outcome at entry into care (ie, "no" indicates individuals without the corresponding outcome)). Differences in mean SOFAS score between these groups ("no" v "yes"' for each outcome) were compared using Welch's t-test and significant differences are depicted using an asterisk (*** adjusted $P < 0.001$).*

Highly variable social and occupational outcomes

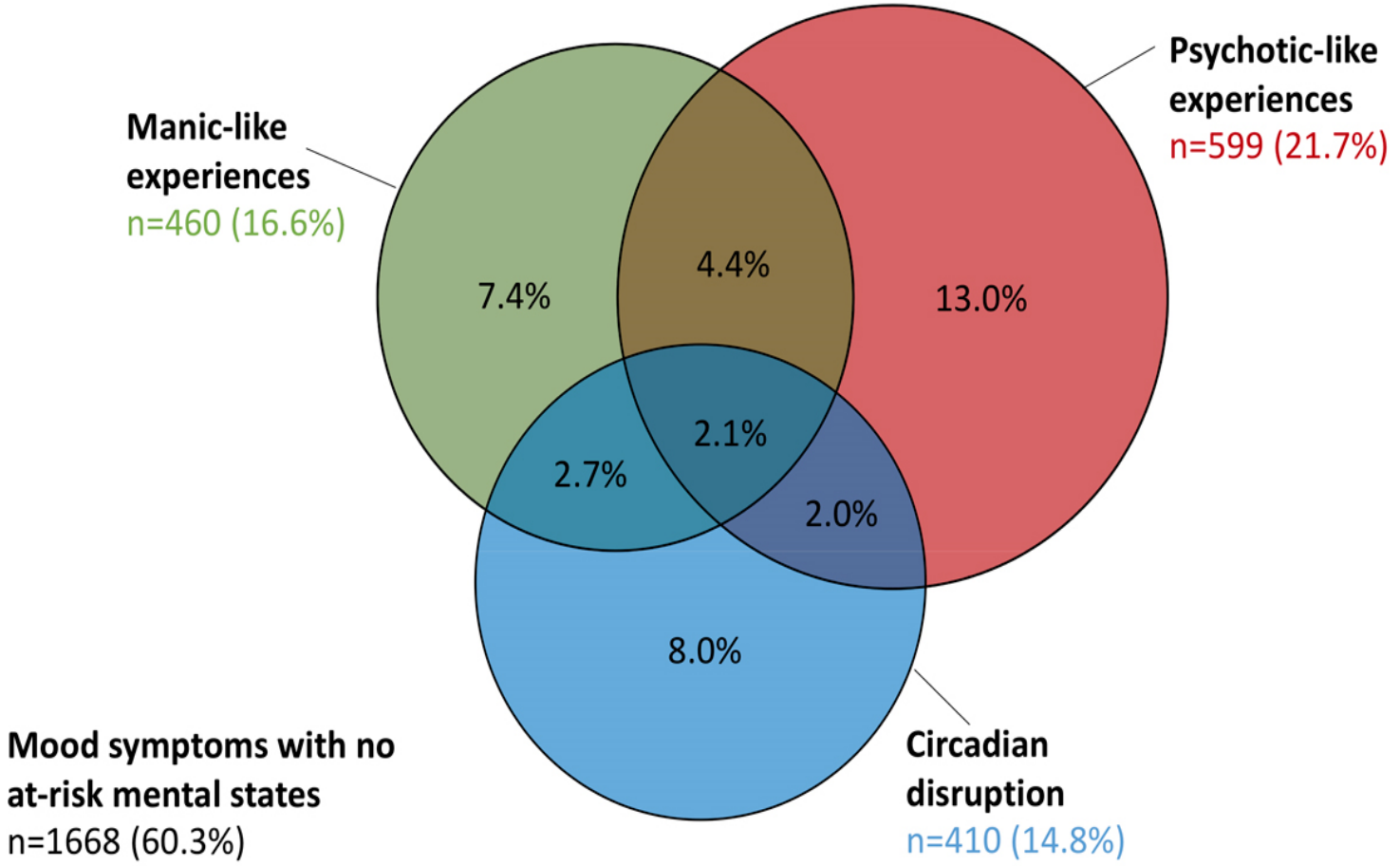


Few individuals (approximately 25%) achieve good and sustained social and occupational function over a two-year period.

Short or longer-term deterioration from initial good functioning or failure to improve substantially from initial poor functioning are much more common outcomes (approximately 75%).

The longitudinal course trajectories of these young people are dynamic and suggest adoption of service models that place much greater attention on multidisciplinary interventions and outcome tracking to prevent early or late deterioration, as well as delivering better longer-term functional outcomes.

Prevalence and patterns of comorbidity between at-risk mental states in the Brain and Mind Centre's Optimyse Youth Cohort at entry to care



Note: Manic-like experiences, psychotic-like experiences and circadian disruption are common (~ 40% of the sample, n = 2767) in young people and are often comorbid phenomena

Various stakeholder perspectives of what should be the focus for mental health care across multidimensional domains

	Young people	Families and carers	Mental health professionals and service providers	Policy makers and funders
Social and occupational function	• Rate importance of social relations higher for quality of life than health professionals[101] • Forced to coordinate their own social needs[102] • Social function rated higher than vocational function[103] • Recovery must focus on economic and social inclusion[104]	• Family members value more social and community involvement[104]	• Recent move from service activity, to clinical outcomes, quality of life and recovery-oriented measures[105] • Often a disconnect between mental health care and social services[106]	• Major focus on improving educational and economic participation[102,106] • Targeted interventions for economically inactive young people to prevent chronic disability and poorer illness trajectories[107] • Recognise the costs of mental illness for society as a whole and of the health benefits of employment[108]
Self-harm, suicidal thoughts and behaviours	• Want to be involved in improving policy and services to address suicidal thoughts and behaviours[109] • Forced to navigate the health care system to manage suicidality[102]	• Families often first point of call, but can be unhelpful in response[109] • High burden placed on families to navigate the health care system to access support for suicidality[106]	• Many health professionals or service providers are unwilling to engage with suicidal individuals[110]	• Participation in whole-of-community responses to reducing suicide[111]
Alcohol or other substance misuse	• Low rates of access to mental health services by young people linked with high rates of alcohol or other substance misuse[112] • Relatively small numbers of consumers seek help for substance misuse, and will often instead present with other physical or mental health-related complaints[113]	• Major challenges for families to deal with both mental health and substance misuse	• There is often a disconnect between mental health care and addiction services[106,114] • Active exclusion of individuals with substance misuse from mental health services • Negative attitudes towards patients with substance use disorders[113]	• Integrating mental health and alcohol or other substance use treatment is often recommended but poorly resourced or organised[106]
Physical health	• Rate physical health higher for quality of life than health professionals[101] • Often forced to manage these needs themselves[102] • Value overall health higher than the general public[103] • Recovery must include medical care[104]	• High burden placed on families to navigate the health care system to access support for physical health needs[102] • Carers often want to help their young people reduce smoking habits, yet feel isolated and that there is limited support from services to assist them[115]	• Despite increased physical and sexual health risks, a young person's mental illness often becomes the single focus • There is often a disconnect between mental health care and medical services[106] • Avoidance of responsibility for reducing smoking among people with mood and psychotic syndromes[116]	• Social, existential, mental, substance misuse and somatic care should be integrated at the local level[106] • A focus on reducing risk factors that contribute to morbidity and premature mortality[111]
Illness type, stage and trajectory	• Do not rate symptom reduction as highly as health professionals for quality of life[101] • Those with severe symptoms value symptom reduction higher[103] • Believe recovery should go beyond symptom control[104]	• Formal diagnostic processes are largely relevant to gaining access to care	• Rate symptom reduction for quality of life higher than young people[101] • Most outcome measures focus on symptoms[105] • Services are focused exclusively on group level symptom reduction[106]	• Social, existential, mental, substance misuse and somatic care should be integrated at the local level[106]

Note: The findings presented here are based on a literature review. The shading of each box indicates the priority level for each of the domains across the different stakeholder groups, based on group consensus of the available literature. Dark shading = high priority; medium shading = moderate priority; light shading = low priority.

- The extent to which the focus of mental health care extends beyond mental illness type or psychological symptoms is variable
- Priorities differ depending on whether you are a young person, family member or carer, health professional or service provider, policy maker or funder

Summary…

- Mood and psychotic syndromes most often emerge during adolescence and young adulthood, with effects that can have long term consequences
- The BMC Youth Model is a **highly personalised and measurement-based care model** that aims to **prevent progression to more complex and severe forms of illness**
- The first core concept of the BMC Youth Model is a **multidimensional assessment and outcomes framework** to address the holistic needs of young people presenting for care
- This framework helps to ensure that youth mental health focuses on the outcomes that matter to young people

Thank you!

CPD points can be claimed for psychologists, psychiatrists, social workers, occupational therapists, and mental health nurses.
Please contact ***tanya.jackson@sydney.edu.au*** *for more information.*

The Brain and Mind Centre would like to thank our research partners, such as

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