

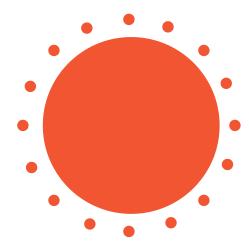
Bipolar disorder (BD) is a mental health condition that can cause extreme changes in a person's mood, energy, and thinking. With a worldwide prevalence of 1%, high burden of disease, and excess and early mortality, there is an urgent need for prevention, early identification, and treatment access for BD. While precedents for early intervention in other mental disorders exist, there is currently no commonly understood, systematic approach to early intervention for BD.

This begs the question...

How might we advance an early intervention approach for people with or at-risk of BD?

# Overview

In early 2023, the Daymark Foundation (a private family foundation based in Toronto, Canada) partnered with Orygen (a leading youthspecific early intervention clinical research centre based in Melbourne, Australia) to explore the question "How might we advance an early intervention approach for people with or at-risk of BD?". This discussion paper summarises the challenges, barriers, and opportunities in an early intervention approach to BD, and outlines a set of proposed ideas for advancing this field.



etween May and July 2023, Orygen conducted 27 semistructured interviews with a variety of stakeholders to explore the challenges, barriers and opportunities for early intervention in BD. Interviewees included researchers, clinicians, peer-support workers, advocates, and funders. Some interviewees also reported that they had lived experience of BD or personal experience caring for someone with BD.

The findings from these interviews established the foundation for an in-person gathering in Lausanne, Switzerland designed to surface, flesh out, pressure test, and prioritise concrete ideas and solutions for advancing the field of early intervention for BD. A small group of BD experts were consulted in Chicago, USA prior to the event to inform its design and content.

#### **Definitions**

While early intervention in BD is sometimes used to refer only to care provided at the first manic or hypomanic episode (or within the first few), this initiative has taken a broader definition of early intervention. Early intervention incorporates preventive intervention for young people who may be at high risk of developing BD (e.g., individuals with a family history of BD) or those experiencing depressive symptoms and/ or hypomanic symptoms.

51 st

stakeholders invited to participate in the interviews

27 in

interviews conducted

participants at Chicago consultation

interviewees present at gatherings

30

participants at Lausanne meeting







**Definitions** 



Resourcing



Measurement & Assessment



**Data** 



**Treatments** 



Service Capacity & Models



**Families** 



Collaboration

# Key Insights from Interviews

### **Awareness**

There is limited recognition and understanding of BD across all stakeholder groups, from the general public to mental health clinicians and services.

ublic education was viewed as crucial to enhancing earlier and timely diagnosis and treatment of BD. Stigma and denial pose significant barriers to help-seeking, diagnosis, acceptance, and engagement in treatment and research. Interviewees suggested that widespread education be paired with hope and evidence that early detection and intervention offers better outcomes for those experiencing BD.

Clinician awareness was also viewed as a key issue, with several interviewees noting that clinicians often hesitate to make a diagnosis of BD and instead assign different diagnoses such as depression, first-episode psychosis and/or borderline personality disorder. Interviewees also commented that clinicians generally lack an awareness of BD risk factors including family history of BD.

"Stigma and denial pose significant barriers to help-seeking, diagnosis, acceptance, and engagement in treatment and research."

### **Definitions**

The lack of consensus on definitions and key aspects of early intervention in BD is holding back the field.

There was an observed lack of consensus on many aspects of early intervention in BD, including:

- What quantifies/qualifies an at-risk state for BD:
- The definition and measurement of diagnostic delay;
- What characterises the early stage of BD;
- The age at which BD can be diagnosed (namely, whether BD can be diagnosed in childhood?);

- What constitutes early intervention for BD;
- How predictors are defined and applied; and
- What measurement tools should be used in clinical and research settings (including minimum datasets).

Inconsistencies in definitions were viewed as a key barrier in our ability to pool research data and collaborate internationally.

# Resourcing

BD is under-prioritised and underfunded relative to other mental health disorders especially considering the personal and economic costs associated with the disorder.

Interviewees were frustrated by the limited prioritisation and funding for BD, which spans both clinical and research settings. Funding for early intervention in mental health was viewed as disproportionately directed towards psychosis, despite the fact that early intervention in BD shows considerable potential. Interviewees suggested that the lack

of interest from traditional funding bodies necessitated the exploration of alternative funding opportunities – including philanthropy – to support research, provide preliminary evidence, and foster collaborations that will build the momentum to motivate better prioritisation and funding for BD.



# Measurement & Assessment

There is no core battery of validated tools and approaches to help diagnose, monitor, and measure outcomes in BD.

Interviewees noted the lack of objective measures for diagnosing BD. Existing assessment tools for BD were considered inadequate and burdensome, poorly suited to young people, and lacking sensitivity to assess changes over time. Clinicians were viewed as lacking skills in assessment and diagnosis of the early stages of BD, leading to misdiagnosis of BD as unipolar depression and inappropriate treatment. A further complication was the observation that young people rarely present

when manic/hypomanic, and that it can be difficult to retrospectively assess past episodes of mania/hypomania and other symptoms. The comorbidity of BD with other disorders (e.g., Attention Deficit Hyperactivity Disorder, ADHD), was also a factor in making diagnosis a challenge. The use of digital and assistive devices and applications to assess symptom changes over time was raised as an opportunity for improving measurement and assessment.

### **Treatments**

The evidence base for early intervention treatments in BD is scarce, including which treatments should be offered to which individuals, and when and how treatments should be delivered.

Interviewees talked about a range of treatments that are available for BD but noted that there are no specific clinical guidelines to guide their use in the BD early intervention context. Numerous treatment challenges relating to medication were mentioned.

Lack of robust evidence and algorithms to assist with selection, dosing, sequencing or combining of medications

Though
psychosocial
interventions
were deemed
useful and aligned
to general BD
treatment guidelines,
interviewees noted
various challenges.

Lack of clinician training, skills, and confidence to deliver BD-specific psychosocial interventions Overemphasis on medication as the main treatment for BD

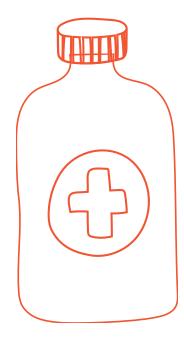
Underutilisation of lithium ( 'the gold standard treatment')

Lack of novel therapies to treat young people with BD

Lack of physical health monitoring



Lack of developmentally appropriate psychosocial interventions for young people with BD



Side-effects and consideration of cost-benefit of medications, particularly for people at-risk of BD

Risks associated with the use of antidepressants in people at-risk of BD

Access and uptake barriers

Peer support interventions were deemed valuable for young people in the early stages of BD, while digital interventions, apps, and smart technologies were viewed as showing promise but are currently underutilised.

Overall, there was consensus that there is a need for more evidence and standardisation in treatments for young people with BD.

# **Service Capacity & Models**

There is a lack of capacity and skill among clinicians to diagnose and treat the early stages of BD, and it is unclear what service model would best serve this population.

There was consensus around the lack of adequate services for early intervention in BD, and the low priority BD holds within existing services. Interviewees were concerned about the lack of expertise, knowledge, and confidence to screen for, diagnose, and treat BD in both primary care and youth mental health service settings, partly due to few people with BD presenting to services. A number of barriers to workforce training and education were described, including expense, perceived burden, and relative prioritisation.

Issues regarding existing services included: under-resourcing of services; access delays; the high threshold for entry; inadequate follow-up after diagnosis or acute care; and lack of continuity of care and long-term follow-up. There were mixed views among interviewees about whether specialist early intervention services for BD should be developed or whether young people with BD should be treated in broader mood disorder services, early psychosis services, or transdiagnostic youth services.

Opportunities for improving service capacity and models were considered. Some proposed using early psychosis service models as a

blueprint for dedicated clinical treatment programs for BD; however, others argued that the treatment for BD should be different from psychotic disorders. The potential role of assistive technologies and tools to assist clinicians with identification and treatment planning needs further exploration.



# Collaboration

To advance early intervention in BD, we need to look at new opportunities to collaborate that involve all stakeholders, including those with lived experience.

Interviewees strongly advocated for stronger collaboration and described how the current lack of collaboration within and across stakeholder groups – researchers, clinicians, service providers, and funding bodies – is a major barrier to improving early intervention in BD. There was recognition that people with lived experience and families should also be more involved in collaborative work. There was optimism expressed about recent collaborative initiatives in BD early intervention, including the International Society for Bipolar Disorder's (ISBD) Early Intervention Task Force and the meeting led by Orygen and the Daymark Foundation in Lausanne.

### Data

We need meaningful data, harmonisation of existing data, as well as development of large prospective datasets – the bigger the better.

Interviewees described several problems with current research and associated data:

- 1. Type of data: Interviewees questioned whether the right data was being collected, and suggested an overemphasis on symptoms, genetic, and imaging data rather than aspects such as functioning and cognition which may be more relevant to young people with BD and their families;
- **Heterogeneous samples**: It was noted that current data often do not capture cultural, ethnic, and gender diversity;
- **3. Length of studies**: Interviewees noted the lack of longitudinal and real-time data, which was viewed as essential to understanding the progression of the disorder both prior to and following onset;
- **4. Quality**: The shortage of randomised controlled trials and lack of clinical registries or learning health networks with measurement-based care was mentioned as a concern;
- **5. Consistency**: The inconsistent use of measures and definitions internationally makes it difficult to collaborate and combine datasets, which consequently limits the use of contemporary analytic techniques, including machine learning approaches.

These data issues were seen to limit our understanding of the disorder, treatment, and outcomes, as well as our ability to predict who might be at risk of developing BD and benefit from preventive care.

# **Families**

## Families have a key role in assessment and treatment, and should be better supported.

Interviewees viewed families as an underutilised but valuable resource in supporting diagnosis and treatment of young people with or at-risk of developing BD. They highlighted how collateral information from family members is often not taken into account, and that families have to advocate for consideration of family history, possible BD diagnosis, and appropriate treatment. Family therapy was recognised by interviewees as a useful component of BD early

intervention. In families with a history of BD, education regarding early signs of BD was viewed as a potentially helpful strategy to improve early detection. Families themselves were also viewed as needing greater support, particularly during acute episodes. Family peer support groups for parents of young people atrisk or in the early stages of BD were noted as valuable but rarely available.



# **International Data Network**

#### Harmonising and consolidating youth early intervention research data

articipants highlighted two main concerns regarding data. Firstly, the low incidence of BD means that individual research groups and clinical services can only access small participant samples - these datasets are insufficient to answer important questions about BD. Larger datasets are required to better understand the trajectory and outcomes associated with BD. Secondly, there are no agreements regarding what (minimum) data should be collected and how data can be harmonised across sites/groups to enable pooling of data to create larger datasets. An International Data Network was proposed as a potential solution to both these issues. This Network would first reach

consensus on the outcome measures Challenges that should be tracked – including both clinician-rated and youthappropriate self-report. Ďata collected within the Network could be used for research (such as largescale clinical trials, cost-effectiveness studies, studies on mechanisms that underpin outcomes), quality improvement, and in healthcare systems to promote person-centred care. This data could also be shared across countries and stakeholder groups, including clinicians, researchers, people engaged in treatment and families.









# **Staged Care Learning Network**

#### Experimenting with service models for youth at risk of BD

The Staged Care Learning Network was proposed as a way to explore and evaluate different approaches to serving the "missing middle": young people with non-specific symptoms and risk factors who do not meet diagnostic criteria for a specific disorder, but are too complex or severe to be served by general youth mental health services. Such an approach follows a staging framework for the evolution of disorders, and is grounded in the concept of pluripotentiality: that young people with serious and complex symptoms can have very different trajectories, and may go on to develop any one of a range of mental disorders.

Addressing this stage is critical in preventing young people at risk of serious mental health disorders from falling through the cracks. Currently, these individuals are either not receiving care because they do not have a diagnosis, or are being prematurely referred to specialty services that may not be appropriate for them. The care provided at this stage should be non-specific and multimodal (e.g., initial case management, psychosocial interventions such as cognitive behaviour therapy or family-focused therapy, supports for functioning and cognition, physical health

monitoring, and family engagement) and cross-symptomatic (no symptom-based exclusion criteria). The intensity of interventions would increase as required.

(e.g., integrated youth services, early

psychosis intervention programs). Rather than seeking to prove that one model works, the Network would

take on an open-minded approach whereby different sites would test

their models and share learnings to improve care. Evaluation would





As it is still unclear where this service would be best "housed", the Network would begin with a small number of initial sites that embed this atrisk service into different settings







include routine outcome measures to track a young person's treatment and progress (to be defined), and process measures exploring how the sites are coming together and operating. "Active ingredients" for a well-functioning, effective service model would be identified and additional sites would be invited to join the Network. Funders would be engaged along the

# **BD Awareness Campaign**

### Improving recognition of BD by raising awareness among young people and families

A general lack of understanding of BD makes it challenging for young people and families to recognise symptoms and share their concerns with clinicians and in community settings. The BD Awareness Campaign was proposed as a means to increase knowledge of BD in young people and families, and equip them to recognise early signs, seek help, and know what questions to ask of healthcare providers. This initiative would also aim to impact healthcare professionals, through both the ripple effects of public awareness as well as campaign materials that are specifically targeted at clinicians and allied health groups.

This Awareness Campaign would embrace a collaborative approach internationally, with a range of stakeholders including people with lived experience of BD, family members of individuals with BD, those working in the BD field, influencers and celebrities,

BD organisations and charities, and marketing/communications experts all working together to create campaign materials.

The Awareness Campaign could be launched to coincide with World Bipolar Day (March 30th of every year) and designed to reach large audiences globally using platforms such as social media and TedX talks. To develop the Awareness Campaign, a staged approach could be adopted beginning with a working group, then moving on to engage additional stakeholders, expand networks, and create and disseminate

content.

"A means to increase knowledge of BD in young people and families, and equip them to recognise early signs, seek help, and know what questions to ask of healthcare providers"

# Primary Care Capacity-Building

### Improving capacity building in primary and community care

Though primary care is often the first point of contact for young people with or at-risk of BD, it is well-known that primary care physicians do not feel confident diagnosing or treating the disorder. The Primary Care Capacity-Building Initiative was proposed as a way to build knowledge and skills among primary care physicians and better facilitate collaborative care between primary care providers and mental health specialists including psychiatrists.

Ideas for improving capacity include: the development and implementation of clinical guidelines for youth BD; screening tools for youth-onset BD; and the application of adaptive decision trees/artificial intelligence (AI) to detect at-risk states and BD and guide treatment. The collaborative care component

of this initiative might include embedding psychiatrists in primary care settings, changing funding models and leveraging video technology for specialist consults (with psychiatrists, nurse practitioners, and allied health), use of chatbots (AI and human) for immediate support, and structures and interventions to improve the transition from specialist care back to primary care. Linked to the Lithium Clinic idea, it could also include having a monthly Lithium Clinic in primary care settings.

Challenges addressed

Challenges addressed







To make this initiative user-friendly, primary care physicians and paediatricians would be consulted in its design and implementation.

# **Functional Assessment**

### Recognising early signs and measuring BD in young people through a validated tool

There is a lack of validated tools for detecting BD, measuring changes over time and assessing the multiple range of outcomes associated with the disorder. Functioning (e.g., studying or working, social connections, participating in daily activities) was one area where there is a notable absence of sound tools. A proposal was made to create, trial and implement a Functional Assessment tool specific to young people with BD. The tool could be used to measure functioning and possible risk factors associated with BD (e.g., sleep, mood changes, energy, eating, relationships, school, and substance use, etc.). Prior to developing a new tool, it would be important to review and critique existing measures to identify gaps. Considerations in developing the new tool would include: length (brief or comprehensive), use (screening tool or outcome measure), ease of administration, transdiagnostic capabilities, and sensitivity to changes over time. Involvement of key stakeholders including those with lived experience and clinicians

would be important in driving the focus of the tool. A Delphi (consensus) study could be explored as an option for gaining agreement on the content of the tool. After development of the tool, studies could be conducted to evaluate its implementation into clinical and research settings.

Challenges addressed







"There is a lack of validated tools for detecting BD, measuring changes over time and assessing the multiple range of outcomes associated with the disorder."

# **Lithium Clinics**

#### Increasing use of lithium treatment through specialised community clinics

There is robust evidence for the efficacy of lithium as a first-line intervention, with possible disease-modifying effects if introduced early. Despite the potential benefits of lithium, this medication is under-prescribed, particularly in primary care settings. A range of issues are linked with underutilisation including: stigma of BD; misconceptions that lithium is 'toxic' or associated with batteries; worries about potential side-effects; and uncertainty regarding long-term risks, particularly in young people.

Inspired by Clozapine Clinics for people with schizophrenia, Lithium Clinics could be introduced in existing services. Consultant psychiatrists and nurse practitioners could provide primary and secondary consultation to help prescribe and monitor lithium in young people with BD. Clear clinical guidelines would need to be developed

covering issues such as: when lithium should be prescribed and for whom (e.g., should it be introduced for hypomania in BD-II); how to monitor treatment (including interpreting lithium blood levels); length of treatment; how to monitor for suicidality; and how to address treatment non-response. Large clinical trials could be conducted through the Lithium Clinics.

Challenges addressed



"Inspired by Clozapine Clinics for people with schizophrenia, Lithium Clinics could be introduced in existing services."

# **Idea Prioritisation**

Participants at the Lausanne meeting were asked to vote on the three ideas they believed would have the greatest impact on advancing BD early intervention. This was used to assess the relative potential of each idea. The ideas receiving the greatest endorsement were an International Data Network and a Staged Care Learning Network.

17

**International Data Network** 

17

**Staged Care Learning Network** 

**15** 

**BD Awareness Campaign** 

11

Primary Care Capacity-Building

10

Functional Assessment

6 Lithium Clinics



# Conclusion

This project has highlighted the nascency of the BD early intervention field and the multiple needs and areas of opportunity. The themes that emerged from the interviews have helped consolidate the core needs and can act as a North Star for evaluating progress moving forward. The six ideas that surfaced at the Lausanne meeting reflect the shared perspectives and ambitions of a diverse range of BD stakeholders and are a helpful starting point for a collaborative approach to advancing early intervention in BD.

We sincerely thank all those who participated for their insights, enthusiasm, and commitment to advancing BD early intervention.

# **Next Steps**

The Daymark Foundation will continue to explore these ideas with the participants who expressed an interest in ongoing discussion. We invite additional stakeholders and funders to contact us for more information or to get involved: <a href="https://www.daymarkfoundation.ca">www.daymarkfoundation.ca</a> or vani@daymarkfoundation.ca.

Other queries regarding early intervention for BD can be directed to Orygen via Prof. Sue Cotton <u>sue.cotton@orygen.org.au</u> and/or Dr. Melissa Hasty <u>melissa.hasty@orygen.org.au</u>.





95 St. Clair Avenue West, Suite 200 Toronto ON M4V 1N6 Canada

daymarkfoundation.ca

#### **Contributors:**

Vani Jain André Rebeiz Kayla Ritchie



35 Poplar Rd Parkville VIC 3052 Australia

orygen.org.au

#### **Contributors:**

Sue Cotton Melissa Hasty Clare Shelton Aswin Ratheesh Craig Macneil