Oxford-Toronto Psychiatry Collaboration

Work-in-Progress Report – 2020-2021 (v. 10 Jan, 2022)

2020 & 2021 in figures

- **51** Collaborators
- **3** Publications
- **1** Transatlantic visits
- **5** Core themes determined
- **10** Projects initiated
- **29** Collaborative meetings
- **1** Grant applications
- **1** Research seminars and workshops
- **1** Shared PhD & Postdocs
- **1** Visiting staff

Section 1: History and Formation

Context

The Universities of Oxford and Toronto have been increasing interactions in recent years, as reflected by visits and some more formalised links. This connection has offered appreciation of our respective strengths, and highlighted the potential for collaboration. The two healthcare organisations, CAMH and Oxford Health, are both research active and fulfil a leadership role at a national level yet to date there has been little direct interaction.

The World Health Organisation confirms that mental illness represents 32.4% of the current global disease burden and the cost is set to exceed $6.1 trillion by 2030. Recognising this global challenge and the reality that there have been few effective new treatments and preventative interventions in the last two decades requires a different approach if major discovery advances which can impact the lives of people living with mental health disorders are to be made.

In this context the ability to construct an international partnership between centres for mental health can be recognised as providing a platform for global leadership, offering critical momentum to the research and clinical activities of each institution.

Why an international partner?

Strong partnerships require well-matched parties but provide a wonderful opportunity to share different perspectives and capabilities. For the NIHR Oxford Health BRC, an international partner will help ensure that our aspirations to be 'world-class' can be evidenced throughout our programmes, in both the BRC and Trust. Both the BRC renewal process and follow-on activities of the Trust's Global Digital Exemplar programme will benefit from international benchmarking and collaboration. Similarly, at the University of Toronto and the Centre for Addiction and Mental Health, an international partner will offer new opportunities to jointly innovate, discover and advance best practices in mental health in our respective settings and globally. Leveraging CAMH's Krembil Centre for Neuroinformatics, and CAMH's Research Centres of Innovation, an international partnership can accelerate progress in addressing persisting access, quality, and knowledge gaps in mental health, and guide the future of mental health globally. A natural extension to current multicentre collaborations, whilst being non-exclusive, such a partnership would offer deeper, longer term understanding and collaboration - and will increase our confidence to co-design high impact programmes.

Good partnerships do not oblige engagement, instead they create a framework for mutually beneficial collaboration. Based on a memorandum of understanding and being non-legally binding, the partnering agreement would provide for:

- The creation of an Information exchange where parties would learn/share/participate/co-design digital programmes (for instance, e-prescribing or consent to discuss participation in research)
- Exploration of strong research collaboration attracting industry engagement
- The establishment of a transatlantic federated research informatics network (based on CRIS)
- The facilitation of staff exchanges and training programmes
- Hosting of joint events and conferences

Section 2: Establishing a Framework

The intended partnership would represent a broadening collaboration to a four-way agreement including the clinical services of the Centre for Addictions and Mental Health and Oxford Health NHS Trust. Such an arrangement will help to develop strong integrated translational research models offering the best opportunity to contrast perspectives whilst maintaining focus on the delivery of local goals.

Why is this important?

This collaboration will identify and exploit synergies, and enable platforms for global leadership and for enhancing the research and clinical missions of each institution.

As single institutions operating digital/innovation programmes, resource limitations and scale of operations often restrict the rate of progress and impact potential. Today's life sciences industry reflects a global ecosystem which requires an appropriately modelled contribution from healthcare and academia.

Strong partnerships come from well matched parties but importantly offer the opportunity to share different perspectives and complimentary capabilities ensuring 'world class' can be evidenced throughout. A shared information ecosystem designed for clinicians, researchers and patients, harnessing the power of data, real world and biological, to drive high quality outcomes and world class research with patients engaged and empowered in both.
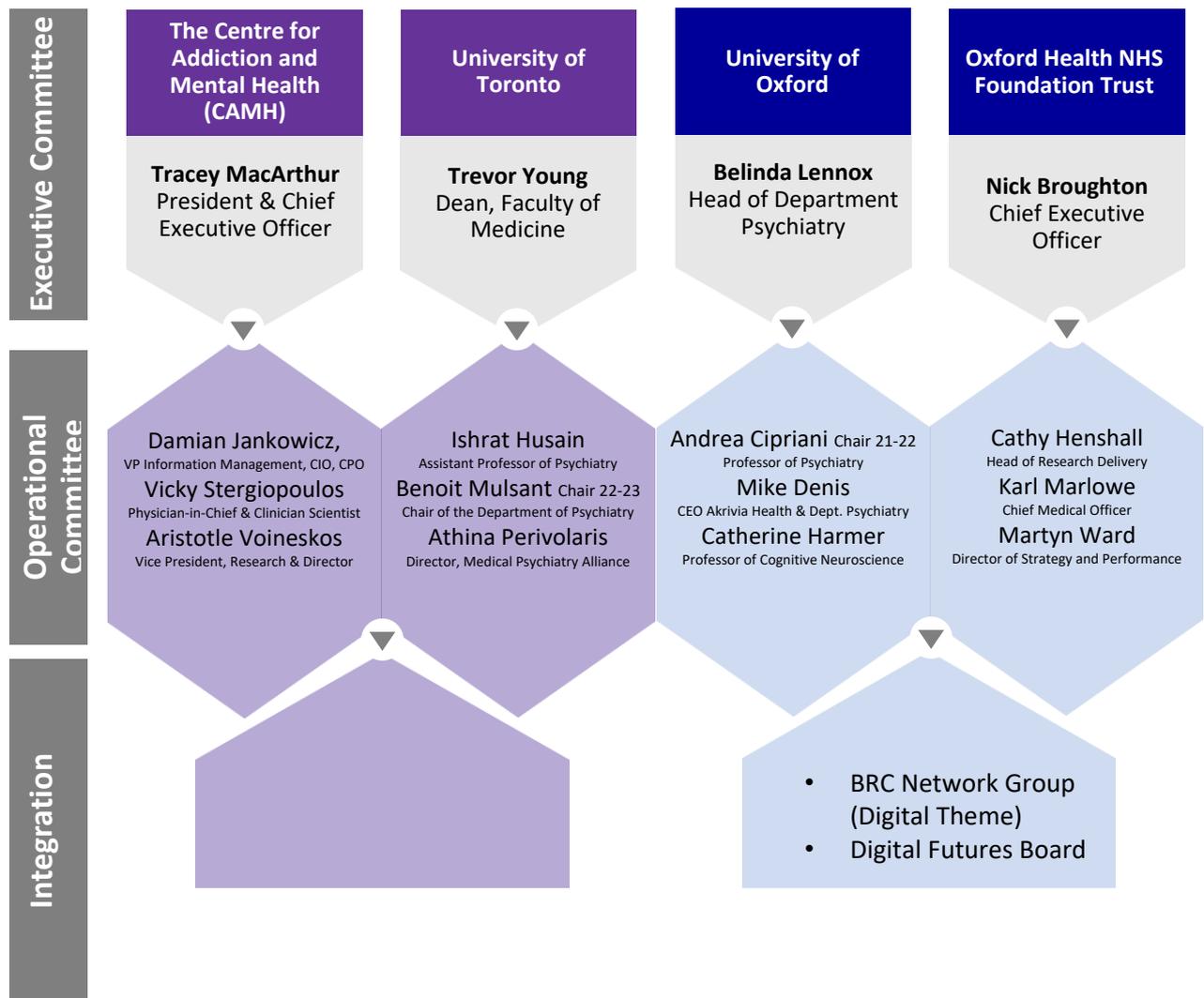
Section 3: Goals

Following extensive consultation, a Memorandum of Understanding (MOU) was signed by the four named entities in November 2020. This MOU set out a framework for collaboration that was aimed towards clear and mutual benefits flowing to individual organisations whilst exploiting the sum of the collective assets (experience, skills, resources…) in play. Recognizing the risks associated with 'too little' and 'too much a stretch', the challenge was to identify a balanced set of goals that could be monitored and built upon in the early stages of partnership.

The following goals were identified, from which an operational committee would draw upon and prioritize.

These are:
- create a hub model for translational research in mental health;
- review research collaboration models, including shared access to data, data science expertise, industry engagement and capacity-building opportunities;
- create a framework for information exchange, where Parties could learn, share, participate and co-design digital programmes;
- facilitate student, faculty member, trainee and staff mobility such as internships, study abroad, exchange, and fellowships, as appropriate;
- participate in, and co-host lectures, meetings, seminars, symposia and conferences;
- jointly apply for funding for collaborative projects from relevant funding agencies or industry;
- explore joint venture opportunities and other opportunities to support innovate programmes;
- collaborate in other areas that foster research, quality/practice improvement and educational cooperation
- review respective digital initiatives and programmes, acting as a critical friend;
- support status of global digital exemplar with reference to 'world class', consider joint digital programmes, for example, Risk Stratification, Telepsychiatry, Consent and governance models;
- promote industry engagement in support of clinical trial establishment

Section 4: Terms of Reference, Membership

Executive Committee

The Centre for Addiction and Mental Health (CAMH)	University of Toronto	University of Oxford	Oxford Health NHS Foundation Trust
Tracey MacArthur President & Chief Executive Officer	**Trevor Young** Dean, Faculty of Medicine	**Belinda Lennox** Head of Department Psychiatry	**Nick Broughton** Chief Executive Officer

Operational Committee

Damian Jankowicz,
VP Information Management, CIO, CPO
Vicky Stergiopoulos
Physician-in-Chief & Clinician Scientist
Aristotle Voineskos
Vice President, Research & Director

Ishrat Husain
Assistant Professor of Psychiatry
Benoit Mulsant Chair 22-23
Chair of the Department of Psychiatry
Athina Perivolaris
Director, Medical Psychiatry Alliance

Andrea Cipriani Chair 21-22
Professor of Psychiatry
Mike Denis
CEO Akrivia Health & Dept. Psychiatry
Catherine Harmer
Professor of Cognitive Neuroscience

Cathy Henshall
Head of Research Delivery
Karl Marlowe
Chief Medical Officer
Martyn Ward
Director of Strategy and Performance

Integration

- BRC Network Group (Digital Theme)
- Digital Futures Board

Section 5: Project Reports

Area 1: Clinical Care and Quality Improvement

Sharing policies and standards of practice on shared priorities (restriction reduction, violence reduction, sexual safety, quality improvement).

- At Oxford: Karl Marlowe
- At Toronto: Vicky Stergiopoulos

Other collaborators include: From Oxford, Daniel Maughan, Angie Fletcher, Britta Klinck, Rabi El-Shirbiny, Viki Laakkonen. From CAMH, Joanna Henderson, Peter Szatmari, Kimberly Hunter, Treena Wilkie, Paul Benassi, Rola Moghabghab.

Status Report:

In early phases as CAMH had several leadership transitions. There is an opportunity to develop shared standards or undertake joint improvement initiatives.

Area 2: Digital Health

- At Oxford: Martyn Ward
- At Toronto: Damian Jankowicz

Suicide Safety: Improving understanding of the role of digital technology in reducing the risk of suicidal acts
- At Oxford: Karen Lascelles
- At Toronto: Lydia Sequeira

AI governance: Improving algorithm and data integrity, fidelity and fair representation in the development of data-driven Clinical Decision Support
- At Oxford: Dan Joyce
- At Toronto: David Rotenberg

Status Report:

Work to explore digital opportunities between Oxford Health and CAMH has progressed well over the past 12 months. The two lead digital officers meet regularly and a number of initiatives have been discussed and a work plan is now in place.

From the areas discussed, two primary themes have evolved and are now actively being worked on. The first is the development of Artificial Intelligence Governance – in particular, the improvement of algorithm and data integrity, fidelity and the development of data-driven Clinical Decision Support. The second theme focuses on Suicide Safety: Improving understanding of the role of digital technology in reducing the risk of suicidal acts.

Both themes have been prioritised at an organisational level and there has been excellent engagement from clinical, business and operational colleagues in the UK and in Canada.

In addition to the primary themes, both organisations are sharing ideas and experiences and having the opportunity to regularly talk through areas of shared interest is of great value. As an example, CAMH has extensive experience of electronic patient records systems and this detailed knowledge is of significant value to Oxford Health as the Trust refreshes its EPR over the next few years. Additional value and learning has been gained from understanding more about approaches to promoting digital and improvements and this is an exciting area of development throughout 2022.

Further themes currently being explored include the use of remote monitoring technology for people in outpatient / community settings; the use, governance and approval of apps in care pathways and approaches to encouraging and supporting service user and clinician-driven innovation, particularly in the digital space. The lead digital officers are also exploring the potential for a series of knowledge exchange or workshop sessions on areas of mutual interest. The intention is to deliver additional value from the partnership, maintain momentum and create opportunities for the development of relationships between a wider range of colleagues across partner organisations.

Despite the geographical distance and different healthcare structures, economies and contexts the partners work in, it is marked how similar some of the fundamental challenges are that face both

provider organisations. This reinforces the value of the partnership and its potential to deliver ongoing mutual benefit.

Area 3: Personalised Psychiatry

Feasibility study for personalized antidepressants pharmacotherapy based on patient's characteristics and preference, to provide measurement-based care.

- At Oxford: Andrea Cipriani
- At Toronto: Benoit Mulsant

Other collaborators include: From Toronto: Ishrat Husain (co-PI), Daniel Blumberger, Stefan Kloiber, Athina Perivolaris. From Oxford, Anneka Tomlinson and Edoardo Ostinelli.

Status Report:

Feasibility Study is ongoing, REB approval obtained on August 27, 2021 and implementation was initiated in October 2021. The broader RCT is in planning stages, PETRUSHKA – Toronto, an RCT in tandem with PETRUSHKA (UK).