The MGH Center of Excellence for Psychosocial and Systemic Research

2023-2024 DMH ANNUAL REPORT





EXECUTIVE SUMMARY

This year, we had many exciting opportunities and achieved significant milestones in advancing our mission to improve the health and wellbeing of individuals across Massachusetts. We are pleased to open by highlighting a number of our activities that have direct connections to work being done by DMH.

These include:

- 1. Our collaboration with DMH to expand capacity for early intervention services for first episode psychosis in the state;
- 2. Collaborative work with the DMH Office of Inpatient Management (OIM) to identify barriers and facilitators of best practices guidelines around using de-escalation strategies in the service of preventing aggressive incidents in our state hospital settings;
- 3. Work spearheaded by our peer consultants to improve peer integration in the Cambridge Health Alliance (CHA) system, provide support to peer supporters across the Commonwealth, and to contribute to and disseminate best practice guidelines for integrating peers across diverse systems of care;
- 4. Efforts led by our peer team to make the Southeast Recovery Learning Center (SERLC) more welcoming and relevant to the preferences of a more diverse membership; and
- 5. Collaborations with key community partners designed to improve the reach and impact of effective psychosocial interventions.

These accomplishments reflect our deep commitment to promoting health equity as a foundational value in all that we do.

HIGHLIGHTS OF THE PAST YEAR

COLLABORATION WITH DMH TO EXPAND CAPACITY FOR FIRST EPISODE PSYCHOSIS

As a direct result of the tremendous work and coalition building done by Massachusetts DMH, the landscape of care for early psychosis has changed dramatically in our state since the publication of the seminal NIMH-RAISE ETP randomized controlled trial of 2-years of NAVIGATE coordinated specialty care as compared to usual care. This study found that at the end of the 2-year treatment period, those allocated to the NAVIGATE coordinated specialty care model stayed in treatment longer, had better quality of life, had less severe psychotic and depressive symptoms, had more gains in working or going to school, were more likely to receive a prescription that conformed to treatment guidelines, and experienced fewer side effects than those allocated to usual care. Duration of untreated psychosis was an important moderator of initial treatment effectiveness, underscoring the urgency of early identification and intervention with first episode psychosis.¹ A five year follow up of participants in this trial showed durability of benefits of having received NAVIGATE insofar as those participants reported better quality of life, lower psychiatric symptom burden, and fewer days in the hospital over the follow up period.²

Leadership of the MGH COE (Drs. Mueser and Cather) were closely involved with the development and provision of the NAVIGATE intervention in the original study together with the larger NAVIGATE training team, have worked alongside DMH, MAPNET, and a number of community providers to provide training and consultation to these teams in the service of expanding capacity for evidence-based treatment of first episode and early psychosis. Over the past year, NAVIGATE training has been provided to staff of 10 services, including Boston Medical Center, Brockton Area Multi-services, Cambridge Health Alliance, Community Health Link, Corrigan Mental Health Center, PREP-West, Eliot Community Human Service, Edinburg Health and Human Services, Massachusetts General Hospital, and McLean-OnTrack. Longitudinal data are being routinely collected from these first episode programs and are used as part of measurement-based care processes as well as to advance learning in the field.

¹Kane JM, et al. (2016). Comprehensive versus usual community care for first-episode psychosis: 2-year outcomes from the NIMH RAISE early treatment program. *The American Journal of Psychiatry*, *173*(4), 362–372. https://doi.org/10.1176/appi.ajp.2015.15050632

²Robinson DG, et al. (2022). Outcomes during and after early intervention services for first-episode psychosis: Results over 5 years from the RAISE-ETP site-randomized trial. *Schizophrenia Bulletin, 48*(5), 1021-1031. <u>https://doi.org/10.1093/schbul/sbac053</u>

UPDATE ON PEER TEAM ACTIVITIES

Over the past year, our peer consultant team of eight individuals led by Dr. Anne Whitman, our senior peer consultant, has independently pursued several important lines of inquiry based on needs identified through peer-led listening groups conducted across Massachusetts.³

One primary focus has been on determining the processes by which peer support can be most successfully integrated into systems of care, such as the Community Behavioral Health Centers (CBHCs). The peer team has been consulting with the Malden and Cambridge CBHCs run by Cambridge Health Alliance (CHA) to support best practices in peer integration, which has included their creation of a weekly support group for peer supporters. The peer team meets weekly with senior management to highlight and address successes and challenges brought up in the peer support meetings. A month meeting has also been implemented for peer supporters at the state level. Preliminary findings from this initiative are detailed in the Peer Integration Project (PIP) report. *Click here to read the full PIP report*. In Fall 2024, we are looking forward to discussing these findings with our colleagues at the UMass Implementation Science and Practice Advances Research Center (iSPARC) to identify commonalities with their assessment of barriers and facilitators to peer integration within adult community clinical services teams and think together about how best to ensure that this work is used in real-world settings so that systems of care as well as patients and their families are benefitting from the power and promise of peer support.

Another key focus of the peer team's work in Y6 has been the continued implementation of improvement plans in the <u>Southeast Recovery Learning</u> <u>Center (SERLC)</u> to increase the representation of individuals from minoritized groups in the Recovery Community Centers (RCC). This work aims to ensure that programming is relevant and accessible to these groups.

Additionally, our peer team has also become integral to the core curriculum of educating the next generation of healthcare providers to be more equipped to deliver patient-centered care. They continue to play a central role in teaching medical students, psychiatry residents and fellows on topics such as recoveryoriented care, shared decision-making, and the advantages of involving family members in care.

³Delman J, Arntz D, Whitman A, Skiest H, Kritikos K, Alves P, Chambers V, Markley R, Martinez J, Piltch C, Whitney-Sarles S, London J, Shtasel D & Cather C. (2024). Using community-based participatory research to conduct a collaborative needs assessment of mental health service users: Identifying research questions and building academic-community trust. *Health Promotion Practice, 25*(5), 855–864. https://doi.org/10.1177/15248399231171144

UPDATE ON COLLABORATIONS WITH KEY COMMUNITY PARTNERS

DMH Child Behavioral Health Knowledge Center

Under the leadership of Dr. Margarita O'Neill-Arana, Ed.D., the DMH Child Behavioral Health Knowledge Center has been a central partner, advocate, and funder supporting dissemination of the <u>Living In Families with Emotions (LIFE) program</u>, a 10 session group-based intervention designed for adolescents that includes two Zoom-based sessions for parents and other caregivers that was developed by Dr. Daphne Holt, MD, PhD, Director of the MGH Resilience and Prevention Program and a key member of the MGH COE leadership. In one of the MGH COE's first research projects, LIFE was piloted in 11-14 year olds with subsyndromal psychiatric symptoms who were identified via screening done in a pediatric clinic in a predominantly Latinx community.⁴ This study found that LIFE was feasible to deliver in community settings and that it was associated with improved emotion regulation and emotion recognition, and reduced psychiatric symptoms, including depression, suicidal thoughts and behaviors, and psychotic experiences.

Over the past year, with the support of the DMH Child Behavioral Health Knowledge Center, three LIFE training workshops (two in-person, one virtual) were provided. These trainings reached 73 teachers, parent volunteers, peer coordinators, school counselors, and administrative leaders from 8 community partner organizations. Expanding and adapting the LIFE training workshop to be deliverable both in-person and over zoom allowed us to reach sites with limited access to Boston's hub of mental health services and expertise. We focused on providing trainings to community partners located in under-served and under-insured areas of the state, including those officially designated as Health Professional Shortage Areas (HPSAs) (e.g., Chelsea/Everett/Revere/Lawrence), and included schools and community organizations with a wide reach (e.g., the NAN Project, which serves 70+ schools; Massachusetts Family Resource Centers; the Boys and Girls Club, which has 50+ chapters). Following the training workshops, trainees perceived LIFE to be highly acceptable and appropriate for the needs of the populations they serve, and highly feasible to implement in their organization. Trainees also said that they felt equipped to better understand youth mental health needs and apply the LIFE skills. After the training workshop, trainees also reported significantly greater openness to using evidence-based practices compared to before.

Cory Johnson Post-Traumatic Healing Program

Our Center has enjoyed a wonderful partnership with the Cory Johnson Post-Traumatic Healing Program (CJP), a community-driven, anonymous, no-cost, drop-in program that was founded in 2014 offered through the Roxbury Presbyterian Church Social Impact

⁴Clauss JA, Bhiku K, Burke A, Pimentel-Diaz Y, DeTore NR, Zapetis S, Zvonar V, Kritikos K, Canenguez KM, Cather C & Holt DJ. Development of a transdiagnostic, resilience-focused intervention for at-risk adolescents. *J Ment Health*, *32*(3), 592–601. <u>https://doi.org/10.1080/09638237.2022.2140790</u>

Center. CJP's Can We Talk...[®] is a pioneering initiative that uses community-based, clinically supported, and spiritually informed approaches to foster healing in urban communities affected by trauma. As of January 2024, there were ten Can We Talk...[®] sites in Massachusetts, with two more under development.

Our collaboration with CJP involved co-creating a survey and implementing a longitudinal research methodology to better understand who is being served by the CJP program and assess the program's impact. Our findings suggest that CJP programming plays a unique and vital role in supporting a community who almost universally report having experienced numerous traumatic life events and racial discrimination. Despite indications that over one-third of respondents likely met DSM-V criteria for post- traumatic stress disorder, 22% identified CJP as providing their only source of support for trauma, grief, and loss. The data suggest CJP was beneficial and well-received by participants, underscoring its unique role in addressing mental health needs for a trauma-affected community. The report is now being used by CJP to attract new members and demonstrate the value of this program to funders. In the year ahead, our Center will work closely with CJP to support and advance its strategic priorities, particularly around strengthening connections with local behavioral health resources to better support the communities and neighborhoods served by CJP. <u>Click here to read the full CJP report.</u>

Bridge Over Troubled Waters

Since our Center's inception, we have maintained a close and productive collaboration with Bridge Over Troubled Waters (BOTW), a Boston-based organization serving youth experiencing homelessness. We are in the final phases of writing up two research projects with BOTW for publication. The first was a randomized controlled trial of a brief, five-session, manualized motivational enhancement intervention designed to address problematic substance use among youth experiencing homelessness. Our findings demonstrated the feasibility of delivering the intervention with high fidelity and high levels of participant satisfaction with the intervention. Notably, we observed higher attendance rates in the motivational enhancement group compared to usual care, and this group showed significant reductions in alcohol use from pre- to post- treatment. The second project involves a secondary analysis of data from BOTW clients who were enrolled in a rapid rehousing program. Our findings underscored the critical role of addressing substance use, building healthy relationships, and considering pregnancy-related implications for women to improve housing stability and outcomes for vulnerable youth. We look forward to continuing our collaboration with BOTW, using these research findings to inform future service development and expansion as well as to pursue further grant funding in partnership with BOTW.

COLLABORATION WITH THE DMH OFFICE OF INPATIENT MANAGEMENT

Over the past year, we also deeply valued the opportunity to collaborate with our colleagues at iSPARC, the UMass Center of Excellence that is also funded by DMH, to conduct listening groups with staff at DMH hospitals in order to learn more about factors that assist and challenge the management of aggression and violence on DMH inpatient units. MGH COE staff facilitated a total of twelve, 60-minute listening group sessions between January 18, 2024 and February 6, 2024 to learn about state hospital staff's experience of patient aggression. Each group consisted of 6 to 8 hospital staff participants. Five groups were conducted with Tewksbury Hospital staff, five with Solomon Carter Fuller Hospital staff, and two with Lemuel Shattuck Hospital staff. All but one group was conducted in person. The majority of listening groups were co-facilitated by two MGH COE doctoral-level staff and attended by a MGH COE clinical research coordinator who took detailed notes.

Themes for factors contributing to patient aggression were organized according to a priori categories of patient, staff, and environmental/ hospital/societal factors. Effective strategies were categorized as those related to prevention, treatment strategies, staff, leadership, and environmental factors. Ineffective strategies were categorized as those related to staff factors, hospital leadership, training and screening, hospital policies and external factors.

Our learnings from these listening groups led DMH to take action to address issues by forming a consultation group including inpatient medical staff, DMH leadership, and Dr. Oliver Freudenreich, a key member of our Center's leadership. Dr. Oliver Freudenreich will lend his expertise in the psychopharmacology of those with severe mental illness by providing consultation to DMH inpatient teams participating in the reduction of aggression pilot that the DMH OIM is sponsoring in response to the listening sessions we facilitated earlier this year. In the following sections of this Executive Summary, we focus on other key areas of work done by the MGH COE over the past year, including:

- An update on training the next generation of psychologists
- An overview of our annual conference produced in collaboration with iSPARC and DMH
- A summary of our dissemination efforts and grants over the past year
- A list of awards received by our faculty and staff

UPDATE ON JUNIOR FACULTY AND PSYCHOLOGY TRAINEE ACTIVITIES

Our junior faculty and psychology fellow are engaged in a range of innovative projects that are detailed in the report. We would like to highlight two projects that stand out for their potential impact on mental health care in Massachusetts. These initiatives are in line with broader statewide efforts to enhance coordinated specialty care for psychosis and to reduce criminal legal involvement of individuals with serious mental illness.

Dr. Cheryl Foo is leading a project focused on the network of first-episode psychosis programs across Massachusetts, many of which receive DMH support. Her research investigates program characteristics that affect patient retention and family engagement in team-based care, and explores strategies programs use to engage patient and family engagement in care. This work has the potential to influence program practices and inform training to improve implementation of coordinated specialty care for early psychosis.

Dr. Faith Scanlon is collaborating with Worcester Recovery Center and Hospital (WRCH) to provide Changing Lives Changing Outcomes-9 (CLCO-9), a manualized, time-limited intervention designed to improve mental health and lower recidivism among individuals with serious mental illness who also have criminal legal involvement. Training in this intervention will be provided to UMass psychology interns and interested staff in Fall 2024 and once IRB approval is obtained, this intervention will be offered on the WRCH units. This project holds promise for improving both clinical and functional outcomes for a highly vulnerable population.

ADVANCING KNOWLEDGE THROUGH RESEARCH

We were delighted to host the annual joint research conference for the MGH and UMass Centers of Excellence this past year where we had the opportunity to highlight the groundbreaking work of our colleague, Dr. Randi Schuster, Director of School-Based Research and Program Development, MGH Center for Addiction Medicine, focused on the prevention of mental health and substance use disorders. One example of this is Dr. Schuster's development and implementation of <u>iDECIDE</u>, a low-touch, targeted (Tier 2) intervention for students caught violating school substance use policy. Dr. Schuster's team has trained over 1000 facilitators in Massachusetts, and iDECIDE is currently disseminated in over 400 middle and high schools across the Commonwealth.

We were also pleased to have Dr. Eden Evins, Founding Director of the MGH Center for Addiction Medicine and a member of our Center's senior leadership, speak at our annual conference about the empirical argument against separating behavioral health and substance use disorders in psychiatric care and research. Dr. Evins and colleagues also outlined the potential harms of vaped nicotine among adolescents, which include the progression to use of combustible tobacco, as well as the neurobiological priming effects of nicotine on the developing brain that may accelerate addiction to other substances.⁵ These findings underscore that screening for and preventing the progression of nicotine use disorders may be an important strategy for preventing other substance use disorders among adolescents. Over the past year, Drs. Evins and Schuster were awarded a grant from the National Cancer Institute (NCI) to investigate this research question.

In addition, over the past year, our team has published numerous high impact papers advancing the understanding of: psychosis across the lifespan, reducing medical morbidity among individuals with serious mental illness, and improving health equity for individuals belonging to minoritized populations.

⁵Winickoff J, Evins AE & Levy S. (2024). Vaping in youth. JAMA, 332(9), 749-750. <u>https://doi.org/10.1001/jama.2024.13403</u>

2023-2024 BY THE NUMBERS

3 NEW RESEARCH/QI PROJECTS:

- Clozapine point of care absolute neutrophil count testing device (**Principal Investigators**: Freudenreich and Lim; **Community Partner**: NSMHA Freedom Trail Clinic)
- Changing Lives and Changing Outcomes-9 at Worcester Recovery Center and Hospital: Implementing and evaluating a mental illness and criminal risk focused intervention for people with serious mental illness (**Principal Investigator:** Scanlon)
- Gun Violence and Prevention QI Curriculum

18 RESEARCH/QUALITY IMPROVEMENT (QI) PROJECTS IN PROCESS

Selected research/QI projects:

- Medical marijuana, pain, and opioid use in patients with chronic non-cancer pain
- Randomized controlled trial of varenicline for cessation of nicotine vaping in adolescent non-smokers
- Associations between recreational cannabis retail sales and THC detected in psychiatric emergency department presentations
- Mental Contrasting with Implementation Intentions (MCII) as a singlesession stand-alone intervention to increase exercise in persons with mental health challenges
- MAPNET fidelity to the Coordinated Specialty Care and Individual Placement and Support models
- Artificial intelligence-enabled mental health assessments of healthcare providers
- Interrupting developmental pathways to schiszophrenia: Protecting youth at risk for cannabis use and psychosis

\$4,233,466 AWARDED GRANT FUNDS \$8,285,476 TOTAL BUDGET FOR GRANTS UNDER REVIEW

62 PUBLISHED MANUSCRIPTS, BOOKS, EDITED BOOKS, AND BOOK CHAPTERS

38 PRESENTATIONS AND POSTERS DELIVERED 9 OF 37 DELIVERED BY COE PEER CONSULTANTS

AWARDS AND RECOGNITION

- Mr. Paul Alves was asked to join the DMH Commissioner's Advisory Council, which advises the DMH commissioner on mental health policy and challenges and successes within the Massachusetts mental health system.
- Ms. Valeria Chambers received the Lifetime Achievement Award at the Kiva Centers Certified Peer Specialist Award Ceremony.
- Ms. Valeria Chambers was asked by Dr. Thulani DeMarsay to be on the board of the Sankofa Institute for Collective Wellbeing, where they are working to create a curriculum around mental health, trauma and addiction, lived experience, and the behavioral health perspective in Ghana, South Africa, and Zambia, whilst also incorporating African traditional beliefs and values.
- Dr. Abigail Donovan received the 2024 Exceptional Mentorship in the Clinical Realm Award from the Massachusetts General Hospital.
- Dr. Abigail Donovan received the 2024 Zen Award for "exemplifying extraordinary calm in the storm" from the Massachusetts General Hospital Child Psychiatry Fellowship.
- Dr. Abigail Donovan was accepted to the competitive MGH ELEVATE Leadership Program.
- Ms. Jacquie Martinez was awarded a position on the WeSpark Advisory Committee for her expertise as an individual with lived experience and a Peer Specialist.
- MGH FEPP was awarded inclusion in the DMH "Early Psychosis Coordinated Specialty Care-Staff Enhancement and Evidence Based Practice Implementation Master Agreement" which provides funding to support implementation of coordinated specialty care services.