

## 2018 Seed Funding Competition Awardees

**Title:** Online Cognitive Behavioural Therapy for Addiction: Efficacy and Cost-Effectiveness In a Pragmatic Clinical Trial. **PI: Lena Quilty**

**Abstract:** Heavy alcohol and drug use is reported by a substantial number of Canadians, and accounts for billions of dollars to Canadian society each year. Yet, only a minority of those experiencing difficulties with substance use go on to access specialized services. The limited availability of evidence-based psychological treatment, such as cognitive behavioural therapy (CBT), is a particular challenge to the effective management of the escalating harms associated with addictions. Computer- and web-based interventions can deliver the content of CBT with high fidelity, and hold substantial promise in this area. Computer-Based Training for Cognitive Behavioral Therapy (CBT4CBT), developed by Dr. Kathleen Carroll and colleagues at Yale, offers a low cost and user-friendly method by which to deliver accessible, consistent and high quality CBT for those seeking support for substance misuse. To date, CBT4CBT has primarily been examined as an adjunctive treatment in alcohol or general substance use disorder (SUD) samples in the U.S. The therapeutic benefit of CBT4CBT as a “stand-alone” treatment for SUD has received more limited empirical attention, and a comparison between online versus standard care for SUDs incorporating a cost-effectiveness analysis is critical to evaluate its potential to impact on health services in Canada. The purpose of this study is to compare the efficacy and cost-effectiveness of a stand-alone implementation of CBT4CBT to treatment-as-usual in an outpatient sample seeking treatment for SUD. Hypotheses: We hypothesize that CBT4CBT will exhibit greater therapeutic benefits and lower healthcare costs compared to treatment -as-usual. Methods: We propose to randomize 52 participants to receive either CBT4CBT or treatment-as-usual for eight weeks. Participants will be recruited from the Centre for Addiction and Mental Health Addictions Program integrated assessment service. Measures of substance use, substance use disorder symptoms, quality of life, and healthcare costs will be completed before and after treatment and at a six-month follow-up. Significance: Addiction is a leading contributor to psychiatric morbidity, mortality, and functional impairment. CBT4CBT has demonstrated substantial promise in improving access to treatment for those struggling with addictions. The multimedia presentation of CBT4CBT increases the potential value of this intervention to a broad range of adults struggling with SUD, for whom literacy, concentration, and other issues may limit the value of more text-based technology-facilitated programs. The proposed investigation will evaluate the efficacy and cost-effectiveness of this promising and innovative approach in outpatients seeking treatment for SUD. Data from this investigation will be used to inform funding applications for a rigorous implementation of this program, by incorporating local estimates of clinical outcomes and costs, and patient perspectives of treatment format and content as well as research priorities for its implementation and evaluation in Ontario health services. The proposed investigation is thus a crucial step to realizing this innovation in clinical care to an innovation in clinical practice.