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## CONFERENCE ABSTRACT

# Technology-Enabled Collaborative Care for Diabetes and Mental Health (TECC-D): Feasibility and Satisfaction of a Co-Re-Designed Integrated Virtual Care Model

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**Objective:** For individuals living with Type-2 Diabetes (T2D), mental health issues such as distress, anxiety, and depression are common. However, current models of care require those living with T2D and mental health issues to navigate a fragmented healthcare system to receive physical and mental health services. This is especially true in rural areas where there are additional barriers at the individual and provider level. To address these gaps, we co-re-designed a person-centred Technology-Enabled Collaborative Care for Diabetes and Mental Health (TECC-D) model through iterative input.

**Co-Re-Design:** To meet the complex needs of those living with T2D and mental health issues, a co-re-design process was utilized. This involved building on existing assets, including a previously co-designed collaborative care model that was re-designed for this population with input from three people with lived experience of diabetes, diabetes and mental health care providers, and community stakeholders. This team supported the design and implementation of the model throughout the study duration.

**Methods:** In this explanatory sequential feasibility trial, the TECC-D model leveraged existing assets including widely available technology (telephone, web-conferencing) to integrate T2D and mental health support through weekly, virtual health coaching sessions with a Certified Diabetes Educator, supported by a multidisciplinary virtual care team for 8 weeks. Primary outcomes included the feasibility and acceptability of the TECC-D model with exploratory outcomes including changes in mental health, substance use, and physical health behaviours collected at baseline, 4, 8, and 12 weeks. Provider and partner experience and satisfaction were also explored through a qualitative descriptive study.

**Results:** 31 participants were recruited and completed the program between June 2021 and June 2022. Study findings demonstrate that the TECC-D model is a feasible and scalable care solution that empowers individuals living with T2D and mental health issues to take an active role in improving their physical and mental health. Participants and providers described program components (e.g., health coaching, virtual care team) and program delivery (e.g., frequency and

duration of the program) positively. This included: 1) seeing virtual care as practical and effective for managing routine care needs; 2) feeling that having an expert care coach supported by a virtual care team was “over and above” the care that participants had previously experienced; 3) building expertise and capacity within the care team specific to diabetes and mental health; and 4) recognizing that integrated care is “missing from diabetes care” and that in offering clinical integration, participants felt “much more than just the sum of my parts”.

**Conclusions:** Utilizing widely available technology in the current health system and engaging existing primary and community-based care assets, this model of care was found to be both feasible and acceptable by participants, providers, and patient partners and may improve the lives of individuals living with T2D and mental health issues.