NORTHERN HEALTH
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Assessment of Socioeconomic, Psychological, Behavioral, Lifestyle and Emotional Barriers Affecting Long-Term Glycemic Control and Progression to Complications in Patients with Type 1 and Type 2 Diabetes

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ABSTRACT:
Diabetes is a multifactorial metabolic disorder characterized by the presence of hyperglycemia due to either insulin deficiency or a lower efficacy of insulin in the human body. Persistent hyperglycemia can eventually damage major body structures such as the heart, blood vessels and the eyes, leading to extensive morbidity and mortality. Patient's self-management of their diabetes, through regular tracking of blood glucose levels is crucial to stopping the progression of diabetes. However, the literature has shown that many socioeconomic, psychological and behavioral barriers play a large role in poor outcomes of diabetes management. Such factors can include lower income, education levels and poor social support networks. Within Northern Ontario, diabetes is very much a prevalent issue. In 2012, the prevalence of diabetes within the North East and North West LHIN were 12.8% and 12.5% respectively, compared to the provincial prevalence of 10.2%. Many of the studies found in our literature search were based in large urban centers within the United States. This study would hope to add to the existing evidence base from a Northern Ontario context. 94 patients were included in this study. These patients have been diagnosed with either Type 1 or Type 2 Diabetes for more than five years since the start of the study and see a Sudbury-based endocrinologist at the Diabetes Care Service Program. Each patient was given a questionnaire which inquired about socioeconomic, psychological, behavioral, lifestyle and emotional barriers affecting long-term diabetes management. The information collected from these questionnaires will be associated with the respective patient's previous HbA1C levels, as well as any progression to diabetes complications over the last five years. The HbA1C levels and diabetes complication information will be gathered using a retrospective chart review. The preliminary results will be made available at the NHRC conference in June.