Understanding how Social Determinants of Health Impact Diabetes Management: An RRNeT Study

**Abstract.**

*Study Purpose:* The overall purpose of this study is to evaluate the impact of Social Determinants of Health (SDoH) on Diabetes management and determine its association with diabetes outcomes and provider awareness. Specifically, this study will attempt to: (1) determine which SDoH questions and questionnaires are a “best fit” for our sites and patient population; (2) measure the correlation between SDoH and diabetes management; Diabetes Distress (DD), Diabetes Quality of Life (DQoL) and diabetes management; as well as the correlation between provider awareness and diabetes management, DQoL, and DD; and (4) measure the interaction between DD, DDQoL and SDoH.

*Study Design:* This will be a multi-site cross-sectional study of type-2 diabetic patients. The researchers will develop three surveys: one for patients with diabetes, one for EMR data collected, and one for providers. The surveys will be anonymous; no identifying information will be collected from the respondents.

*Subjects and Setting:* Respondents will include approximately 1,000 consecutive adult patients with type-2 diabetes who present for a routine outpatient visit with a primary care physician at one of the 10 participating residency clinics associated with the Residency Research Network of Texas (RRNeT). Surveys will be administered by medical students under the supervision of an RRNeT champion at the participating sites. After surveying the consenting patients, the medical student research assistants will review the patients’ EMR for additional key health outcomes and laboratory values, as well as follow up with the patients’ physicians to complete the provider awareness survey. The instruments will contain standard scales measuring social determinants of health, diabetes quality of life, diabetes distress, and additional key health outcomes and laboratory values related to diabetes management. This will allow both a cross-sectional examination of these various outcome measures and an examination of provider awareness relating to patients’ social determinants of health.

*Outcome Measures:* (1) Social Determinants of Health – measured using the Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE); The Accountable Health Communities (ACH) Screening Tool; HealthBegins Upstream Risks Screening Tool & Guide (HealthBegins), Barriers to Care Questionnaire (BCQ), and Behavioral Risk Factor Surveillance System (BRFSS) Adverse Childhood Experience (ACE) Module; (2) Diabetes Quality of Life – measured using the Audit of Diabetes Dependent QoL (ADDQoL); (3) Diabetes Distress – measured using Diabetes Distress Scale (DDS17); and (4) key health outcomes and laboratory values related to diabetes management – measured using an Electronic Medical Record survey developed by RRNeT.