Coalition Aims to Improve Diabetes and Obesity Care for Mid-Southerners

According to the 2017 National Diabetes Statistics Report published by the Centers for Disease Control and Prevention, 30.3 million Americans had diabetes as of 2015. The report also showed that people living in the southern and Appalachian areas of the U.S. had the highest incidence of diabetes. In the Mid-South and Mississippi Delta region, the high percentage of people suffering from diabetes and obesity-associated chronic conditions such as hypertension, obesity, and congestive heart disease is frightening. Minority and underserved populations in particular are disproportionately affected by diabetes and obesity-associated multimorbidity. They are also less likely to seek out recommended care, which results in adverse outcomes, complications, suffering, and death from these conditions.

Researchers leading the Diabetes Wellness and Prevention Coalition (DWPC) are looking to transform obesity and diabetes care in the Mid-South, shifting the focus from reactive, rescue care to high-value, patient-centered care that will mobilize and engage the whole community. The DWPC Registry supports the coalition by delivering a comprehensive patient-data registry and practice-based research network that integrates several health systems and community provider data feeds. This fully HIPAA-compliant and professionally managed system serves as a specialized diabetes and chronic disease registry aimed to improve care for Mid-Southerners living with chronic diseases or who are at risk for chronic diseases.

"The registry includes data from more than 80 participating clinics from across the state of Tennessee as well as the UTHSC-Methodist Le Bonheur Healthcare Enterprise Data Warehouse and from Tennessee Medicaid (or TennCare)," James E. Bailey, MD, MPH, Director of the Center for Health System Improvement and professor of Medicine and Preventive Medicine at UTHSC said. "Around 15 percent of the over 450,000 Mid-South adults in the DWPC Registry live with diabetes. But because the registry includes all patients, it is also useful for health services and clinical trials focusing on other chronic conditions."

Providers who participate in the registry work together to track processes and outcomes of care for people suffering from chronic disease, to help ensure that they receive recommended care. The registry is also specifically designed to help applied health care researchers evaluate the impact of healthcare delivery and health system quality improvement efforts. It serves as a fully qualified Specialized Registry as well that can help providers improve population health outcomes and achieve meaningful use of electronic health records.

"We are able to receive electronic data generated from certified electronic health record technology (CEHRT) through appropriate secure mechanisms for any health care provider interested in joining the Coalition," Dr. Bailey said. Participating providers also receive quarterly practice improvement reports including patient panel characteristics, comprehensive diabetes measures, and rates of common chronic conditions. Additionally, the Registry functions as a Practice-based Research Network (PBRN) and a major site and primary recruitment arm for the Clinical Trials Network of Tennessee (CTN2) as well. It allows providers the opportunity to participate in both practice-based pragmatic research initiatives and clinical trials through CTN2.

Future plans for the registry include making data available to UTHSC researchers (de-identified or identified) for pilot and feasibility studies, and health services research and clinical trials, all under appropriate IRB oversight. A long-term goal for the registry is to be linked with other large data networks in the southeastern U.S.

"It is vital to understand and address the disparities affecting our disenfranchised communities in the Mid-South," Dr. Bailey said. "The registry enables applied healthcare researchers to follow cohorts of patients between primary care physician visits and record hospital-based encounters in near real time. This tool will allow us to develop tailored interventions for the patients most at risk of preventable emergency room visits, hospitalizations, and readmissions."

For more information on the Diabetes Wellness and Prevention Coalition or the DWPC Registry, please contact Carrie Jo Riordan, MPH, at criorda1@uthsc.edu.