Global Diabetes Program

Research profile: The mission of the Global Diabetes Program (GDP) at Parkland is to improve the lives and health of people with diabetes through patient-centered evidence-based care, education, research and community partnerships. One of the goals of the program is to establish a Parkland-based clinical research network that can address a number of research priorities relevant to the population we serve. These include research in clinical therapeutics and comparative effectiveness, population health and patient-centered outcomes, health disparities, quality improvement and translational activities.

The most developed component of this early program has been the activities surrounding quality improvement, which are directly relevant to our clinical care service mission. There are a number of ongoing projects that aim to identify gaps in care or processes and address them in a systematic manner, so as to improve effectiveness and efficiency. Dissemination of the findings and results through presentations and publications is an expected outcome of many of these efforts. Our current projects include:

(A) Discharge planning quality improvement project in collaboration with UTSW Medical School students enrolled in the graduation with distinction track. The two separate projects focus on identifying and addressing gaps that drive 30-day re-admission rates, on both the inpatient and outpatient environments at Parkland

(B) Severe hyperglycemia management in the non-hospital setting. This project is a collaboration between the GDP and Jail Health to develop, implement and optimize an outpatient subcutaneous (SQ) insulin management algorithm for treatment of mild to moderate DKA, or severe hyperglycemia, thus avoiding hospitalization or Emergency Department utilization.
(C) Perioperative insulin management – this is a quality improvement project involving surgery, hospital medicine, anesthesiology, diabetes, nursing and IT to standardize the approach to inpatient insulin management for patients admitted to the hospital with high likelihood of requiring surgery.

(D) Extreme glycemic management initiative – This quality improvement project will put in place a process to monitor episodes of severe hyperglycemia or hypoglycemia within Parkland Hospital and implement decision support/advice to address glycemic extremes where appropriate.

There exist many additional opportunities for quality improvement activities within the GDP. Anyone with an interest in developing or joining a project can contact either Luigi Meneghini or Uma Gunasekaran for additional information and discussion.

Recent publications/presentations:
• K Alvarez, T Tyner, R Turnbull, B Moran, S Hathiramani, J Donahue, K Rodriguez, U Gunasekaran, J Tran, P Bickel, L Meneghini. Reducing inpatient hypoglycemia through order set revisions and standardized education. Diabetes 2016; 64 (suppl 1). Poster presentation (713-P)
• KL Nashatker, NO Santini, K Rodriguez, U Gunasekaran, EE Obialo, S Kassa, M Raja, RE Furman, CV Townsend, AC Matthew, SM Boatright, LF Meneghini. ADA INSIDE: A quality improvement (QI) initiative targeting Hispanic patients with poor glycemic control seen in primary care clinics of a large urban safety net health system. Diabetes 2016; 64 (suppl 1).
• HT Chang, B Kirby, E Phelps, C Rhee, L Meneghini, U Gunasekaran. Reducing Preventable Readmissions for Patients with Diabetes on the Parkland Inpatient Hospitalist Units. 28th Annual National Forum on Quality Improvement in Health Care, Storyboard Poster Presentation, December 4-7, 2016