

IMPLEMENTATION OF A PROTOCOL FOR PEDIATRIC PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT WITH DIABETIC KETOACIDOSIS (B6), Kevin Poel, Mike Shannon, Greg Pilette, Presbyterian Healthcare Services, Albuquerque, NM, (kpoel@phs.org), IRB exempt.

Diabetic ketoacidosis (DKA) occurs in 1-10% of children and adolescents with known type I diabetes or at diagnosis. Cerebral edema is a rare but serious complication amongst children with an episode of DKA, with the incidence between 0.5-1% of pediatric cases. Cerebral edema is the leading cause of mortality in children with DKA and can occur with the first episode of DKA. To decrease the risk of complications associated with DKA, an order set was developed representing the current standard of care. The primary objective of this study is to implement a DKA protocol for the stabilization of pediatric patients presenting to the emergency department with DKA. Secondary outcomes of this study are to determine the incidence of DKA complications when using a DKA protocol which represents the current standard of care. All children <18 years of age who present to the emergency department with DKA will be eligible for study inclusion. The following laboratory values will be collected: blood glucose, potassium, sodium, blood urea nitrogen, bicarbonate and pH. The incidence of insulin boluses as well as fluid boluses above 40mL/kg will also be captured. The differences between children with known type I diabetes versus children presenting for the first time will be evaluated as well. This data will be compared to results of a

retrospective review of the 15 most recent pediatric patients who were treated in any one of Presbyterian's emergency departments for DKA. Results are to be presented.