**Patient Information**

Patient Unit Stay ID: 785320 Unique Patient ID: 006-101509 Gender: Male Age: 42 Ethnicity: Caucasian Hospital Admit Time: 03:08:00 (24-hour format) Hospital Admit Source: Emergency Department Hospital Discharge Year: 2015 Hospital Discharge Time: 19:30:00 (24-hour format) Hospital Discharge Location: Home Hospital Discharge Status: Alive Unit Type: Med-Surg ICU Unit Admit Time: 04:35:00 (24-hour format) Unit Admit Source: Emergency Department Unit Visit Number: 1 Unit Stay Type: admit Admission Weight: 145 kg Discharge Weight: NULL Unit Discharge Time: 22:20:00 (24-hour format) Unit Discharge Location: Acute Care/Floor Unit Discharge Status: Alive Admission Height: 183 cm

**Medical History**

Insufficient data provided to generate a detailed medical history. The provided JSON only contains diagnoses, lab results, treatments, and a limited physical examination. A complete medical history would require additional information such as family history, past medical illnesses, surgical history, social history (including smoking, alcohol use, drug use), and medication history prior to admission. This information is crucial for a comprehensive understanding of the patient's condition and its development.

**Diagnoses**

The patient presented with multiple diagnoses during their ICU stay. These diagnoses, listed in order of entry time, include:

1. Diabetic Ketoacidosis (DKA): ICD-9 codes 250.13, E10.1 (Multiple entries, some active upon discharge) 2. Atrial Fibrillation with Rapid Ventricular Response: ICD-9 codes 427.31, I48.0 (Multiple entries, some active upon discharge) 3. Sepsis: ICD-9 codes 038.9, A41.9 (Multiple entries, some active upon discharge) 4. Acute Renal Failure: ICD-9 codes 584.9, N17.9 (Multiple entries, some active upon discharge)

It's important to note that the diagnosis priority for all listed diagnoses is marked as 'Other'. The lack of a primary diagnosis makes it difficult to establish a clear causal relationship between the diagnoses. Further investigation and clinical correlation are needed to fully understand the interplay of these conditions.

**Treatments**

The patient received the following treatments during their ICU stay:

1. Aggressive volume resuscitation (>250 mls/hr) with normal saline administration (Multiple entries, some active upon discharge) 2. Hemodialysis for acute renal failure (Active upon discharge) 3. Bicarbonate administration (Multiple entries, some active upon discharge) 4. Diltiazem (Multiple entries)

The timing and specific details of these treatments are not fully detailed in the provided data. A comprehensive treatment plan would include details such as dosage, frequency, and route of administration for each medication. Similarly, details about the dialysis sessions (duration, frequency, filter type) are missing. This information is essential to a thorough evaluation of the treatment efficacy.

**Vital Trends**

NULL. Vital sign data (heart rate, blood pressure, respiratory rate, oxygen saturation) are partially available in the physical examination section but are insufficient for establishing trends. A complete time series of vital signs is required to assess the patient's physiological response to treatment and disease progression.

**Lab Trends**

The lab results show fluctuations in several key parameters. The following are some notable trends observed:

* **Glucose:** Significant hyperglycemia was present at the start of the stay (486 mg/dL), followed by high levels throughout the stay (300-400 mg/dL) , before finally declining towards the end of the stay. This is consistent with the DKA diagnosis. * **Creatinine:** The creatinine levels show a marked increase reflecting the acute kidney injury (AKI). Levels initially high (2.07 mg/dL) increased to values above 6 mg/dL, reflecting severe AKI that persisted until the end of the stay. * **Bicarbonate:** Bicarbonate levels were initially low (7-8 mmol/L) and increased to normal ranges (19-20 mmol/L) by the end of the stay, consistent with treatment for metabolic acidosis associated with DKA. * **Albumin:** Albumin levels were consistently low throughout the patient's stay (1.8-2.4 g/dL), indicating possible hypoalbuminemia. The low albumin levels could be related to the sepsis or AKI. * **Bedside Glucose:** The data reveals a pattern of elevated blood glucose throughout the stay. The wide range of values suggests potential variability in glucose control, requiring further analysis to understand the overall glucose management strategy.

Further analysis is needed to fully interpret the trends and establish a clearer picture of the patient's metabolic and renal status. The absence of time stamps for many lab results impedes a detailed analysis of temporal relationships.

**Microbiology Tests**

NULL. No microbiology test data is provided.

**Physical Examination Results**

The physical exam recorded a Glasgow Coma Scale (GCS) score of 15 (4+6+5) at an early stage of the stay. Heart rate was 125 bpm (beats per minute) with a range of 125-126 bpm. Blood pressure was 132 mmHg systolic, with a range of 132-136 mmHg. Respiratory rate was 32 breaths per minute, with a range of 32-34 breaths per minute. Oxygen saturation was 97%, with a range of 97-98%. Admission weight was 145 kg. The physical exam was performed using a structured format.

The limited number of physical exam entries and lack of serial measurements prevent a comprehensive assessment of the patient's physical status over time. Additional observations are needed for a complete evaluation.