Patient Medical Report

1. Patient Information

* **Patient Unit Stay ID:** 447542 * **Patient Health System Stay ID:** 380669 * **Gender:** Male * **Age:** 80 * **Ethnicity:** Hispanic * **Hospital ID:** 143 * **Ward ID:** 259 * **APACHE Admission Dx:** Sepsis, other * **Admission Height:** 167.6 cm * **Hospital Admit Time:** 10:12:00 * **Hospital Admit Offset (minutes from unit admit):** -13796 * **Hospital Admit Source:** Emergency Department * **Hospital Discharge Year:** 2015 * **Hospital Discharge Time:** 06:45:00 * **Hospital Discharge Offset (minutes from unit admit):** 11917 * **Hospital Discharge Location:** Death * **Hospital Discharge Status:** Expired * **Unit Type:** Med-Surg ICU * **Unit Admit Time:** 00:08:00 * **Unit Admit Source:** Step-Down Unit (SDU) * **Unit Visit Number:** 3 * **Unit Stay Type:** readmit * **Admission Weight:** NULL * **Discharge Weight:** NULL * **Unit Discharge Time:** 16:07:00 * **Unit Discharge Offset (minutes from unit admit):** 5279 * **Unit Discharge Location:** Step-Down Unit (SDU) * **Unit Discharge Status:** Alive * **Unique Patient ID:** 005-10606

2. History

NULL (Insufficient information provided in the JSON data to reconstruct a detailed patient history.)

3. Diagnoses

The patient presented with multiple diagnoses during their ICU stay. These diagnoses, listed in order of priority as indicated in the data, were:

* **Primary:** Sepsis with multi-organ dysfunction (ICD-9 codes: 995.92, R65.20) * **Major:** Infectious colitis (ICD-9 codes: 009.1, A09) * **Major:** Acute renal failure (ICD-9 codes: 584.9, N17.9) * **Major:** Congestive heart failure (ICD-9 codes: 428.0, I50.9) * **Major:** Hypochloremia (ICD-9 codes: 276.9, E87.8) * **Major:** Hyperglycemia (ICD-9 codes: 790.6, R73.9) * **Major:** Hypercoagulable state (ICD-9 codes: 286.9, D68.69) * **Other:** Severe hypernatremia (ICD-9 codes: 276.0, E87.0)

The presence of sepsis as the primary diagnosis, along with multiple organ involvement, suggests a severe and complex clinical picture. The secondary diagnoses indicate complications related to the sepsis and underlying conditions. The electrolyte imbalances (hypernatremia and hypochloremia) likely contributed to the patient's overall condition and required careful management.

4. Treatments

The patient received a comprehensive range of treatments, including:

* **Antibiotics:** Piperacillin/tazobactam, cefepime, levofloxacin, metronidazole, and vancomycin. This broad-spectrum antibiotic coverage suggests a concern for polymicrobial infection. * **Respiratory Support:** Oxygen therapy via nasal cannula (though the exact level is not specified). The need for oxygen suggests respiratory compromise associated with sepsis. * **Gastrointestinal Management:** Stress ulcer prophylaxis with pantoprazole. * **Renal Management:** Foley catheter placement. Nephrology consultation. The acute renal failure required close monitoring and management. * **Cardiovascular Management:** Cardiology consultation, intravenous nicardipine (a vasodilating agent), and intravenous heparin therapy. * **Pain Management:** Acetaminophen. * **Diagnostic Imaging:** Chest X-ray and CT scans. * **Infectious Disease Consultation:** The complexity of the infection likely prompted consultation with the infectious disease team. * **Pulmonary/CCM consultation:** The pulmonary and critical care medicine team likely provided additional support.

5. Vital Trends

NULL (No vital sign data was provided.)

6. Lab Trends

The provided lab data shows multiple blood tests performed at various time points during the patient's stay. There are two sets of complete blood counts (CBCs), one early and one late in the ICU stay. The initial CBC showed elevated potassium (3.5 mmol/L), elevated BUN (85 mg/dL), and elevated creatinine (2.1 mg/dL), indicative of renal dysfunction. The later CBC demonstrates improvement in potassium (4.7 mmol/L), BUN (48 mg/dL), and creatinine (1.7 mg/dL). The platelet count also decreased from 193 K/mcL initially to 195 K/mcL later. Blood gas analysis shows low paO2 (75.4mmHg and 83.9 mmHg) and low HCO3 (22mmol/L and 22.9 mmol/L) on two occasions, indicating respiratory acidosis. Electrolyte values show a significant drop in Sodium from 154 mmol/L to 140 mmol/L.

7. Microbiology Tests

NULL (No microbiology test results were provided.)

8. Physical Examination Results

The physical exam recorded at 7 minutes from unit admit time noted a Glasgow Coma Scale (GCS) score of 11 (Eyes 4, Verbal 2, Motor 5), indicating some degree of neurological impairment. Heart rate was recorded as 99 bpm (current), with a lowest of 76 bpm and a highest of 99 bpm. Blood pressure (systolic) was recorded as 114 mmHg (current), with a lowest of 75 mmHg and a highest of 215 mmHg. Respiratory rate was 26 breaths/minute (current), with a lowest of 17 breaths/minute and a highest of 28 breaths/minute. Oxygen saturation was 96% (current), with a lowest of 95% and a highest of 100%. The patient's weight on admission was 61.2 kg. Fluid balance showed a net positive balance of +576 mL. The respiratory mode was spontaneous.

Chart Description

1. **Time Series Plot of Key Lab Values:** This plot would display the trends of key lab values (sodium, potassium, creatinine, BUN, glucose, bicarbonate, platelet count, and oxygen saturation) over time. The x-axis would represent time (in hours or days since ICU admission), and the y-axis would represent the lab value with its respective units. Each lab value would be represented by a different colored line. This visualization will allow for a clear understanding of the temporal relationship between lab values and the patient's overall clinical course. It would help identify whether treatments were effective and if there were any significant fluctuations indicative of worsening or improving conditions.

2. **Bar Chart of Electrolyte Imbalances:** A bar chart would depict the initial and final values of sodium, potassium, chloride, and bicarbonate levels. The x-axis would list the electrolytes, while the y-axis would represent the electrolyte concentration in their respective units. Bars would be grouped into