N441 Care Plan

Lakeview College of Nursing

Kaitlyn Holycross

Demographics (3 points)

Date of Admission 10/24/22	**Client Initials** GW	**Age** 18 years old	**Gender** Male
Race/Ethnicity African American	**Occupation** N/A	**Marital Status** Single	**Allergies** No known allergies
Code Status Full	**Height** 175.3 cm (5'9")	**Weight** 59.4kg (131 lbs)	

Medical History (5 Points)

Past Medical History: The patient has a past medical history of ADHD, depression, and recently diagnosed with type 1 diabetes mellitus.

Past Surgical History: The patient has had no past surgical history according to chart and patient.

Family History: The patient stated "Diabetes runs in the family on my dad's side". There is no known family history present in the chart.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The patient has no history of smoking tobacco or the use of smokeless tobacco. No alcohol abuse is mentioned. The patient currently has a drug use involving marijuana approximately two times per week.

Assistive Devices: The patient does not utilize any assistive devices.

Living Situation: The patient stated " I live with my mom, stepdad, and four siblings".

Education Level: No high school graduation or GED. The patient stated "they might be sending me to DACC to get my GED since I haven't graduated yet".

Admission Assessment

Chief Complaint (2 points): High blood sugar.

History of Present Illness – OLD CARTS (10 points):

The patient had an onset of symptoms the day leading up to going to the emergency department. The patient's symptoms involved weakness, general fatigue, increased thirst, nausea, and polyuria. The symptoms became more evident throughout the day until he received treatment at the hospital. The patient stated, "I think one of my siblings threw out my insulin, so I have been out for a little while." The patient had been feeling off for the last day. Since he was out of insulin, he came to the emergency department, where he was diagnosed with diabetic ketoacidosis related to type one diabetes mellitus. Upon admission, the patient was not necessarily experiencing any pain, just concerning symptoms related to his high blood sugar level, which was 327.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Diabetic ketoacidosis without coma associated with type 1 diabetes mellitus.

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points):

Diabetic ketoacidosis is also referred to as DKA. Diabetic ketoacidosis develops when a person no longer has insulin reserves to break down glucose (Capriotti, 2020). If the body does not have proper amounts of insulin, cells within the body will not get the amount of glucose they need which then causes the pancreas to produce more insulin resulting in hyperglycemia (Hinkle & Cheever, 2018). This condition most commonly occurs in people with type one diabetes since their body does not produce insulin. The absence of insulin causes the formation of lipolysis, which consequently forms ketones (Capriotti, 2020). Since people with type two diabetes still produce some insulin, it is less likely that they will develop diabetic ketoacidosis. However, people with type two diabetes can develop pancreatic beta cell failure causing ketones to form,

resulting in diabetic ketoacidosis. This can most commonly occur in uncontrolled type two diabetes. When DKA occurs, ketones accumulate in the blood, which then alters the blood's pH, resulting in metabolic acidosis (Capriotti, 2020). If untreated, the patient can go into a coma. Diabetic ketoacidosis is diagnosed by a blood glucose greater than or equal to 250 mg/dL, serum bicarb lower than 15 mEq/L, arterial pH lower than 7.3, and high levels of ketones in the blood and urine (Capriotti, 2020). The most common symptoms include polyuria, extreme thirst, nausea, confusion, and fatigue. The body attempts to correct the excess glucose by the kidneys producing water and electrolytes, which causes osmotic diuresis (Hinkle & Cheever, 2018). Osmotic diuresis is the reason for a patient to urinate more, thus feeling dehydrated and thirsty. All of this can hopefully be prevented with proper management of their diabetes unless the patient is unaware they have the condition. The top three causes of diabetic ketoacidosis include infection or illness, missed or decreased insulin doses, and untreated diabetes (Hinkle & Cheever, 2018). Prevention is critical in lessening the risk of developing diabetic ketoacidosis.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

Hinkle, J. L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	4.40-5.80x10^6/mcL	N/A	5.11	

Hgb	13.0-16.5g/dL	N/A	14.8	
Hct	38.0-50%	N/A	44.1	
Platelets	140-440x10^3	N/A	233	
WBC	4.00-12.00x10^3/mcL	N/A	9.10	
Neutrophils	40.0-68.0%	N/A	68.1	Autoimmune diseases such as type 1 diabetes can cause a rise in neutrophils due to the body atacking itself and the cells composed of it (Jones & Bartlett, 2020).
Lymphocytes	19.0-49.0%	N/A	23.5	
Monocytes	2-9%	N/A	7.1	
Eosinophils	0.0-6.0%	N/A	0.8	
Bands	0-3%	N/A	N/A	

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	134-145mEq/L	129	130	The kidneys are being affected by diabetic ketoacidosis. Electrolyte levels can be thrown off when kidney function is imbalanced (Pagana et al., 2019).
K+	3.6-5.2 mEq/L	4.0	4.0	
Cl-	98-107mEq/L	104	103	
CO2	23-29 mEq/L	16	14	Diabetic ketoacidosis causes blood acid levels to go up and correlates with low CO2 levels in the blood due to metabolic acidosis (Jones & Bartlett, 2020).
Glucose	70-100 mg/dL	327	275	The patient's diagnosis was diabetic ketoacidosis due to high blood glucose. Glucose levels will be severely elevated in cases with diabetic ketoacidosis (Jones & Bartlett, 2020).

BUN	8-25 mg/dL	11	8	
Creatinine	0.6- 1.3 mg/ dL	0.95	1.08	
Albumin	3.4-5.4 g/dL	N/A	3.7	
Calcium	8.7- 10.2mg/ dL	8.7	8.9	
Mag	1.7-2.2 mg/dL	N/A	N/A	
Phosphate	3.4-4.5 mg/dL	N/A	N/A	
Bilirubin	0.1-1.2 mg/dL	N/A	0.7	
Alk Phos	20-130 units/L	N/A	61	
AST	8-33 U/L	N/A	15	
ALT	7-55 U/L	N/A	17	
Amylase	40-140 U/L	N/A	N/A	
Lipase	24-151 U/L	N/A	N/A	
Lactic Acid	4.5-19.8 mg/ dL	N/A	N/A	
Troponin	0-0.04 ng/mL	N/A	N/A	
CK-MB	3-5%	N/A	N/A	
Total CK	22-198 U/L	N/A	N/A	

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	1.1 or below for people not taking	N/A	N/A	

	blood thinners			
PT	11-13.5 seconds	N/A	N/A	
PTT	25-35	N/A	N/A	
D-Dimer	less than 0.50	N/A	N/A	
BNP	less than 125 pg/mL	N/A	N/A	
HDL	60 mg/dL or higher	N/A	N/A	
LDL	less than 100mg/dL	N/A	N/A	
Cholesterol	125-200mg/ dL	N/A	N/A	
Triglycerides	less than 150 mg/dL	N/A	N/A	
Hgb A1c	Below 5.7%	N/A	N/A	
TSH	0.5-5.0mlU/ L	N/A	N/A	

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow/ Clear	Yellow/Clear	N/A	
pH	5.0-9.0	5.5	N/A	
Specific Gravity	1.003-1.030	1.020	N/A	
Glucose	Negative	3+	N/A	The patient's body was trying to get rid of the buildup of glucose in his blood. The kidneys will excrete excess glucose in the urine in an attempt to bring balance (Pagana et al., 2019)
Protein	Negative	Negative	N/A	
Ketones	Negative	4+	N/A	High levels of ketones in the urine directly correlate to diabetic ketoacidosis. (Pagana et al., 2019)

WBC	Neg, 0-5/hpf	Negative	N/A	
RBC	Neg, 0-2/hpf	N/A	N/A	
Leukoesterase	0-5 WBC	N/A	N/A	

Arterial Blood Gas Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	7.15	N/A	When metabolic acidosis occurs due to, in this patient's case, diabetic ketoacidosis, it can cause a decrease in blood pH (Pagana et al., 2019).
PaO2	80-100 mmHg	N/A	N/A	
PaCO2	35-45 mmHg	N/A	N/A	
HCO3	22-26 mEq/ L	N/A	N/A	
SaO2	93-100%	N/A	N/A	

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	Negative	N/A	N/A	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (1) (APA):

2020 Nurse's drug handbook (19th ed.). (2020). Jones & Bartlett Learning.

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosby's diagnostic and laboratory test reference* (14th ed.). Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

XR chest view portable was performed in the ED upon patient's arrival. The results showed clear glossy, no infiltrates, heart grossly normal in size, and no other findings.

Diagnostic Test Correlation (5 points):

The test was done potentially as a protocol in the ED. Another correlation could be that the patient expressed a small amount of chest discomfort, which he also mentioned to the nursing student. Reasons for an X-ray could include shortness of breath, a persistent cough, fever, and chest pain (Healthline, 2017). The chest X-ray showed no abnormal results.

Diagnostic Test Reference (1) (APA):

Chest X-ray. (2017, June 23rd). Healthline. https://www.healthline.com/health/chest-x-ray

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	Aleve/Naproxen	Lantus/No known generic version	Novolin N (NPH insulin)	N/A	N/A
Dose	500 mg	100 units/mL. 35 units	100 units/mL. 1 unit		
Frequency	BID daily PRN	Evening	TID before meals		
Route	Oral	SubQ	SubQ		
Classification	NSAID	Long-acting insulin	intermediate-acting insulin		
Mechanism of Action	It blocks arachidonate binding to inhibit both cyclooxygenase isoenzymes, COX 1 and COX 2. This is considered an anti-inflammatory and analgesic effect	Lantus lowers blood glucose by stimulating peripheral glucose uptake. More so by the skeletal muscle and fat it also inhibits hepatic glucose production. It inhibits lipolysis in adipocyte, proteolysis and it enhances the protein synthesis.	The primary MOA if Novolin is the regulate glucose metabolism. It binds to insulin receptors on the muscle adipocytes. It lowers blood glucose and aid the cellular uptake of glucose while inhibiting the output of glucose. This is from the liver.		
Reason Client Taking	Pain/Inflammation	Diabetes to lower blood sugar	Diabetes to lower blood sugar		
Contraindications (2)	NSAID hypersensitivity, first trimester of pregnancy	Low blood sugar, hypersensitivity to the insulin or any components	Low blood sugar, Low amount of potassium in the blood		

Side Effects/Adverse Reactions (2)	Confusion, headache	Swelling of arms and legs, Weight gain	Weight gain, injection site reactions ie. Redness, swelling, and itching		
Nursing Considerations (2)	Be aware patient could be at increased risk for GI bleeding and cardiovascular events	Assess for symptoms of hypoglycemia, and monitor blood sugar levels	Access for symptoms of hypoglycemia, Monitor blood sugars		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	No labs but assess for signs of bleeding prior to giving	Obtain blood glucose levels, perform a physical assessment to establish a baseline before giving the Lantus	Physical assessment to establish a baseline prior to giving, check blood glucose		
Client Teaching needs (2)	The most common side effects is stomach aches, heartburn and nausea, do not take longer that 10 days	Lantus should be taken once a day at the same time unless directed otherwise. Test your blood sugar while using	Do not inject in the same place every time, rotate sites. The insulin needs to go in the fat layer under the skin.		

Hospital Medications (5 required)

Brand/Generic	Tylenol/ Acetaminophen	Tums/Calcium Carbonate	Humalog/ Insulin lispro	Zofran/ Ondansetron	Lantus
Dose	650 mg	1000 mg	2-12 units	4 mg	100 units/mL. 15 units

Frequency	Q4 PRN	Q8 PRN	QID with meals and nightly	Q6 PRN	Nightly
Route	Oral	Oral	SubQ	Oral	SubQ
Classification	Nonsalicylate, para-aminophenenol derivative	Antacid	Antidiabetic insulin	Selective serotonin (5-HT3), receptor antagonist. Antiemetic	Long-acting insulin
Mechanism of Action	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system	It neutralizes the acid in the stomach. It also inhibits pepsin a proteolytic enzyme**.**	It lowers blood glucose by stimulating peripheral glucose uptake by the skeletal muscle and fat. It also inhibits hepatic glucose.	Blocks serotonin receptors centrally at the chemoreceptor trigger zone and peripherally at vagal nerve terminals in the intestine. This action reduces nausea and vomiting by preventing serotonin release to the small intestine and by blocking signals to the CNS.	Lantus lowers blood glucose by stimulating peripheral glucose uptake. More so by the skeletal muscle and fat it also inhibits hepatic glucose production. It inhibits lipolysis in adipocyte, proteolysis and it enhances the protein synthesis
Reason Client Taking	To reduce any headaches or discomfort the patient may experience during his stay	Heartburn, acid reflux	Diabetes to lower blood sugar	To prevent nausea and vomiting.	Diabetes to lower blood sugar
Contraindications (2)	Liver problems, alcoholism	Dehydration Kidney stones	It is contraindicated during episodes of hypoglycemia, and	Concomitant use of apomorphine and congenital long QT syndrome.	Low blood sugar, hypersensitivity to the insulin or any

			patients who are sensitive to insulin or any components		components
Side Effects/Adverse Reactions (2)	Itching, dark urine	Diarrhea/ constipation Stomach cramps	Low blood sugar, weight gain	Hypotension and serotonin syndrome	Swelling of arms and legs, Weight gain
Nursing Considerations (2)	2400 mg (5 doses) in 24 hours is the max. Watch for therapeutic affects	Monitor hemodynamics, may cause hypotension, bradycardia and arrhythmia	Assess for symptoms of hypoglycemia, monitor blood glucose levels	If hypokalemia or hypomagnesemia is present, these electrolyte imbalances should be corrected before mediation is administered. Monitor closely for serotonin syndrome, which may include agitation, chills, confusion, diaphoresis, diarrhea, fever, hyperactive reflexes, etc.	Assess for symptoms of hypoglycemia, and monitor blood sugar levels
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Hypersensivity to acetaminophen or components. Severe hepatic impairment	Check allergy status, assess if patient is pregnant or lactating	Perform a physical assessment to establish a baseline before administering, obtain blood glucose levels	Access dizziness and drowsiness that might affect gait, balance, and other functional activities.	Obtain blood glucose levels, perform a physical assessment to establish a baseline before giving the

					Lantus
Client Teaching needs (2)	Tell patient that tablets may be rushed or swallowed whole. Tell patient to follow dosage guideline precisely. Use cautiously in patients with hepatic impairment or active disease.	Take exactly as prescribed, do not take more or less than instructed. Take it with food or after a meal.	Discuss with patient on how to control and monitor blood glucose and report any issues. Never share insulin needles.	Advise patient to immediately report signs of hypersensitivity, such as rash. Reassure patient with transient blondness that it will resolve within a few minutes to 48 hours.	Lantus should be taken once a day at the same time unless directed otherwise. Test your blood sugar while using.

Medications Reference (1) (APA):

2020 Nurse's drug handbook (19th ed.). (2020). Jones & Bartlett

Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Pt was alert, oriented to person, place, times, and situation Pt appears to be in no apparent distress, rated pain a 0/10. Pt only demonstrated that he had a small amount of discomfort in his chest which was found to most likely be anxiety which is consistent given his past medical history of depression. The pt's overall appearance was appropriate
INTEGUMENTARY:	

Skin color: **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Skin is prink, dry, warm, and intact Skin turgor is appropriate indicating the patient is not severely dehydrated No rashes, bruises, or wounds Braden score of 23
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck appeared symmetrical, trachea was not deviated, and thyroid was non palpable Ears were even, no drainage was present, and hearing seemed to be normal Eyes were symmetrical, sclera was white, no drainage or irritation, and conjunctiva was pink Nose was symmetrical, no deviation, no polyps noted Teeth were present and appropriate
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	Clear S1 and S2 heart sounds No gallops or murmurs were present upon assessment Peripheral pulses were 2+ bilaterally Capillary refill was less than 3 seconds The presence of edema was not found
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** N/A **Size of tube:** **Placement (cm to lip):** **Respiration rate:** **FiO2:** **Total volume (TV):** **PEEP:**	Breath sounds were regular, nonlabored, bilaterally. No wheezes, crackles, or rhonchi present. No ET tube was in use.

VAP prevention measures:	
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	The patient stated "I follow a diabetic/keto diet at home". The patients current diet in the hospital is normal to low carb option. 175.3 cm (5'9") 59.4kg (131 lbs) Bowel sounds are present in all four quadrants The patient stated "my last bowel movement was yesterday afternoon" No pain or masses noted upon palpation Abdomen was soft and nontender Abdomen was not distended and had no scars, wounds, drains, or incisions
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:** **CAUTI prevention measures: ?**	Yellow/Clear 400 mL of urine during my care No CAUTI prevention measures needed due to the patient not having a catheter.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	Full ROM in all extremities bilaterally No supportive devices needed Pt is able to ambulate on his own. The nurse likes to know when he gets up, and stands outside of the door when he uses the restroom just in case due to him previously having a high blood sugar. Pt is a low fall risk with a fall score of 20 due to his IV fluids running continuously.

NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Oriented to person, place, time, and situation Mental status, speech, and sensory all within normal limits Pt is alert, with no LOC
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Pt states "the way I cope is to read a book" Developmental level is age appropriate Pt stated "I believe there is a higher power, but I don't believe in religion or go to church" According to the patient, he has a safe home environment. The patient however did not go into detail about his family.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	65	116/79	20	98.2°	100%
1152	68	115/76	18	98.7°	100%

Vital Sign Trends/Correlation:

The patient's vitals were stable and consistent throughout the time of care. The patient's heart rate remained on the lower end between 65-68. Even though it is less than 70, the patient is healthy, young, and runs track and cross country. Therefore, the patient's heart is healthy and does not have to work as hard, typical for athletes causing a lower heart rate. The patient's respiratory rate, temperature, and oxygen were also within healthy normal limits.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	0/10	N/A	N/A	N/A	No interventions needed at this time due to patient not being in pain.
1056	0/10	N/A	N/A	N/A	No interventions needed at this time due to patient not being in pain.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV:** Right antecubital and left hand **Date on IV:** 10/24/22 **Patency of IV:** Both are patent **Signs of erythema, drainage, etc.:** No erythema, drainage, or apparent issues. **IV dressing assessment:** Clean, dry, and intact	The patient had two IV's During the students care, a bag of 0.9 Sodium Chloride solution was started to help raise the patients sodium level.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	N/A

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
Patient ate 100% of his breakfast. He had oatmeal, bacon, and eggs with 125mL of milk for lunch. Patient ate 100% of his lunch as well. He had a turkey sandwich on wheat, a salad, orange sherbet, and 125 mL of juice.	Patient voided 400 mL of urine during nursing students time of care.

Nursing Care

Summary of Care (2 points)

Overview of care: Two goals for this patient's care are to continue managing his glucose levels and raise his sodium level. The patient's blood sugar has been brought down since being admitted and diagnosed with diabetic ketoacidosis related to his type one diabetes. The electrolyte imbalances due to his diagnosis are currently being fixed by hydrating with a Sodium Chloride solution. Currently, the patient is stable and set to be discharged soon.

Procedures/testing done: The patient had bloodwork, a urinalysis, and a chest X-ray for the small amount of chest discomfort he was experiencing. The urinalysis and bloodwork aided in his diagnosis of diabetic ketoacidosis.

Complaints/Issues: The patient is in no pain currently, as evidenced by rating his pain a 0/10. His only concern was mild chest pain, which was thought to be potentially anxiety.

Vital signs (stable/unstable): The patient vitals are stable, and he is comfortable. The patient's pulse ran slightly below the expected range due to him being a young athlete.

Tolerating diet, activity, etc.: He was tolerating a regular/low-carb diet. The patient said he tries to stick to a low-carb diet at home. The patient can ambulate on his own. The nurse likes to know before he gets up just in case because he was experiencing fatigue upon arrival.

Physician notifications: None noted.

Future plans for client: The patient is looking to be discharged that day once his sodium levels increase slightly. The patient will also receive a prescription for a refill of his insulin since he was out before he could be discharged.

Discharge Planning (2 points)

Discharge location: The patient will be discharged to his home with his mother, step-father, and four siblings.

Home health needs (if applicable): The patient will need insulin and resources to keep his diabetes managed.

Equipment needs (if applicable): N/A

Follow up plan: The patient is to follow up with his primary physician following discharge.

Education needs: The patient should receive education on proper insulin administration, storing insulin, and how to properly manage his blood sugar since he was only diagnosed with type one diabetes eight months ago.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to"	**Rationale** • Explain why the nursing	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the

and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	diagnosis was chosen			nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Imbalanced nutrition less than body requirement's due to cell inability to use glucose related to diabetic ketoacidosis as evidence by the labs drawn.	This nursing diagnosis was chosen due to the patient's insulin deficiency. The patients insulin deficiency has caused a string of events such as electrolyte imbalances.	**1.** Manage the patients glucose levels by providing the patient with regular blood sugar checks and proper amounts of insulin when necessary. **2.** Once the patients glucose is stabilized, his electrolytes that are low such as sodium should be raised. Sodium chloride solution can help balance his sodium levels.	**1.** The outcome would be that the patient's blood sugar and electrolytes are balanced and processing within normal limits.	The patient responded well to the interventions set in place to provide insulin and manage blood glucose and electrolyte levels. No modifications of the plan were needed, and the family responded well to his recovery.
2. Deficient knowledge related to improper insulin use as evidence by the patient	The reason for this nursing diagnosis is related to the fact that the patient was	**1.** Educate the patient on the proper use and administration of insulin. Discuss how	**1.** The proper outcome would be for the patient to understand how to manage his diabetes and be able to repeat	The patient was able to absorb and properly demonstrate diabetes management. There were no

developing diabetic ketoacidosis due not taking his insulin.	not properly using his insulin at home. Also, the patient is newly diagnosed with type one diabetes, therefore, the patient is still learning about his diagnosis and how to properly manage it.	to check and when to check his blood sugar. **2.** Have the patient self-administer insulin in front of the nurse to ensure the patient is doing it correctly.	the steps for administering insulin.	modification's needed and the family responded well. The patient has a goal to continue to learn and properly manage his diabetes.
3. Fatigue related to diagnosis of diabetic ketoacidosis as evidence by the symptom he was experiencing due to high blood sugar levels.	Fatigue is a common symptom of DKA which is what the patient was experiencing. During the nursing students time of care, the patient was recovering from the diagnosis. His fatigue was starting to get better throughout the day once he was able to rest, eat, and have his electrolytes and blood sugar balanced out.	**1.** Allow the patient to rest and recover. Create a routine and calm environment, especially before bed. **2.** Balancing out the patient's blood sugar and receiving healthy balanced meals can help his body recover. A healthy balanced low carb meal can help to restore his body as well as adequate hydration.	**1.** Restoration of the patients level of energy would occur. The patient would feel recovered and able to resume full activity.	The patient was able to recover from the fatigue he was experiencing and responded well to the intervention's set in place. There were no modifications needed, and his family was happy to see him recover.

4. Ineffective health maintenance related to uncontrolled diabetes as evidence by his diagnosis of diabetic ketoacidosis.	This nursing diagnosis was chosen due to the patient not being able to properly maintain his diabetes.	**1.** Ensure the patient has proper access to the supplies needed to manage his diabetes. **2.** Provide proper education and resources needed to help the patient maintain a healthy and balanced lifestyle following his diagnosis.	**1.** The patient would understand the steps needed to maintain and manage his diabetes by the end of his stay at the hospital. This will ensure the patient has proper health maintenance in the future.	The patient was able to respond well to the interventions which helps him understand proper health maintenance. The family was able to learn as well to help him manage his diabetes. No modifications were needed.
5. Risk for unstable blood glucose related to type one diabetes as evidence by patients diagnosis of diabetic ketoacidosis.	Because of the patients now history of not taking his insulin, he is at an increased risk of not controlling his diabetes properly. The patient is young and newly diagnosed, managing his glucose could be hard for him.	**1.** Providing education is the top intervention for a lot of the nursing diagnoses including this one. **2.** Ensure the patient has all of the resources and medication he needs to manage his diabetes so he doesn't get readmitted for DKA or other diagnoses related to diabetes.	**1.** The patient would be able to take what he learned from his stay at the hospital to prevent future complications related to his diabetes.	The patient was able to understand the importance of his education regarding diabetic management to prevent future complications. The family responded well and will help ensure his insulin is in a safe place in the fridge so it won't be thrown out on accident again. No modifications were needed at this time.

Other References (APA):

Concept Map (20 Points):

Subjective Data

Pt stated he felt “nauseous, fatigued, thirsty, and was urinating a lot which caused him to go to the hospital”.
Pt stated “I have no current pain”
Pt stated “I have slight discomfort in my chest”.
Pt stated that “I haven’t taken my insulin in a couple of days because I think one of my siblings threw it out”.

Nursing Diagnosis/Outcomes

Imbalanced nutrition less than body requirement’s due to cell inability to use glucose related to diabetic ketoacidosis as evidence by the labs drawn.
Deficient knowledge related to improper insulin use as evidence by the patient developing diabetic ketoacidosis due not taking his insulin.
Fatigue related to diagnosis of diabetic ketoacidosis as evidence by the symptom he was experiencing due to high blood sugar levels.
Ineffective health maintenance related to uncontrolled diabetes as evidence by his diagnosis of diabetic ketoacidosis.
Risk for unstable blood glucose related to type one diabetes as evidence by patients diagnosis of diabetic ketoacidosis.

Objective Data

Pt’s vitals: BP-116/79, HR-65, RR- 20, Temp-98.2, O2-100%
Pt appears to be in no current distress, and rates his pain a 0/10.
Pt can ambulate on his own.
Pt’s admitting diagnosis is diabetic ketoacidosis without coma related to type one diabetes.

Client Information

Pt is an 18 year old African American male who had a chief complaint of high blood sugar. The pt was diagnosed with diabetic ketoacidosis. Pt weighs 59.4 kg and is 175.3 cm tall. Pt is a full code.

Nursing Interventions

Manage the patients glucose levels by providing the patient with regular blood sugar checks and proper amounts of insulin when necessary.
Once the patients glucose is stabilized, his electrolytes that are low such as sodium should be raised. Sodium chloride solution can help balance his sodium levels.
Educate the patient on the proper use and administration of insulin. Discuss how to check and when to check his blood sugar. Have the patient self-administer insulin in front of the nurse to ensure the patient is doing it correctly.
Allow the patient to rest and recover. Create a routine and calm environment, especially before bed.
Ensure the patient has proper access to the supplies needed to manage his diabetes.
Balancing out the patient’s blood sugar and receiving healthy balanced meals can help his body recover. A healthy balanced low carb meal can help to restore his body as well as adequate hydration.