N433 Care Plan #1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 5/31/22	**Client Initials** AK	**Age (in years & months)** 13 years 6 months	**Gender** Male
Code Status Full	**Weight (in kg)** 76.4 kg	**BMI** 28.41 kg	**Allergies/Sensitivities (include reactions)** Insulin Aspart/Novalog Rash

Medical History (5 Points)

Past Medical History: Asthma, type 1 diabetes mellitus

Illnesses: Asthma, type 1 diabetes mellitus

Hospitalizations: Diabetic ketoacidosis 6 years ago when he was 7 years old.

Past Surgical History: No surgical history

Immunizations: Up to date for age

Birth History: Full-term, no complications

Complications (if any): None

Assistive Devices: Insulin pump

Living Situation: Lives at home with his mom, stepdad, and older brother

Admission Assessment

Chief Complaint (2 points): Diarrhea, vomiting, decreased appetite

Other Co-Existing Conditions (if any): Type 1 Diabetes Mellitus, Asthma

Pertinent Events during this admission/hospitalization (1 points): None

History of present Illness (OLD CARTS) (10 points):

On 5/30/22, this 13-year-old male with a history of insulin-dependent type 1 diabetes mellitus went to the emergency room at BroMenn Hospital. His mother reported, “Everything

was normal until about five days ago." He began having generalized abdominal pain, frequent vomiting, diarrhea, and a decreased appetite. He was treated for dehydration and BroMenn and discharged back home. On 5/31/22, he returned to BroMenn emergency room for hyperglycemia, and dehydration. He was transported to Carle Foundation Hospital by Arrow Ambulance and admitted to the Pediatric unit for hyperglycemia, dehydration, and viral gastroenteritis.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Type 1 diabetes mellitus

Secondary Diagnosis (if applicable): Viral gastroenteritis

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

When this patient was seven years old, he was taken to the hospital because he had become so sick, was vomiting, having diarrhea, was lethargic, and all he wanted to do was sleep. That day, he was diagnosed with a virus and a blood glucose level of 1,000. He was in diabetic ketoacidosis (DKA), and this was when they learned that he had an autoimmune disease known as Type 1 Diabetes Mellitus (DM).

This autoimmune disease produces T-lymphocytes that destroy the pancreas' beta cells, and when the pancreas is not working correctly, insulin production is not as it should be (Ricci et al., 2021). Insulin deficiency in the body prevents the cells from taking in glucose which means there is an excess of glucose in the blood rather than being used for the fuel the body needs (Ricci et al., 2021). The kidneys work overtime to decrease the amount of blood glucose, and as a result, there is a breakdown of fat and protein that replaces the glucose for energy for the body (Ricci et al., 2021). Increased fat and protein metabolism results in ketones in the urine and is a

sign of diabetic ketoacidosis (DKA) (Ricci et al., 2021). His insulin level was adjusted, and he was started on IV fluids to correct his blood glucose level and rehydrate him. DKA can be life-threatening and requires treatment immediately. Many things can cause an increase in glucose production and put the person with diabetes at risk for DKA; stress, hormone changes, illness, and infections are a few of the common risk factors (Ricci et al., 2021). People with diabetes mellitus must monitor their glucose levels closely and keep track of the carbohydrates they are eating (Ricci et al., 2021).

The patient came into the hospital on 5/31/22 after experiencing vomiting, diarrhea, and a decreased appetite for a few days prior. He had elevated blood glucose levels, many ketones in his urine, slight leukopenia, and a slightly elevated BUN level, all caused by infection, viruses, and diabetes mellitus (Pagana et al., 2021). Due to the viral gastroenteritis and diabetes mellitus, his blood glucose levels, and urine pH required frequent monitoring for DKA. His blood glucose monitoring was every two hours, and his urine pH monitoring was with every void. A person with type 1 DM needs to monitor glucose levels closely, watch for indications of hyperglycemia and hypoglycemia, and be ready to treat either condition. This patient has an insulin pump and Dexcom monitor that keeps track of his insulin level, monitoring every five minutes, and alerts him and his mom when the level starts trending downward or upward. In his case, his mom knows that when his levels become unstable, the decrease or increase happens fast, and he needs treatment immediately. He became sweaty and clammy during this shift and was not feeling well. The Dexcom monitor indicated a level of 116, trending down. Between his symptoms and the monitor, the patient and his mom knew he needed some sugar. The patient received two apple juice containers (240 mL total) to start drinking. After he drank the first container, he started feeling better, and the number started going up on the monitor.

Adolescents experience hormone changes, mental, physical, and emotional changes and growth, stressors from school, peer acceptance, and pressures, and they are learning how to make decisions and be more independent (Ricci et al., 2021). Being a type 1 diabetic can be challenging for this age group and noncompliance risks. This patient is knowledgeable and has a good understanding of his disease, managing it, and communicating well with his mom. He works hard to make sure he manages his diabetes the best way he can.

Pathophysiology References (2) (APA):

Pagana, K.D., Pagana, T. J., Pagana, T.N. (2021). *Mosby's diagnostic and laboratory test reference* (15th ed). Elsevier

Ricci, S.S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing (4th ed.).* Wolters Kluwer.

Active Orders (2 points)

Order(s)	Comments/Results/Completion
Activity: Ad lib as tolerated	This patient changed positions multiple times during my care. He ambulated to the bathroom and back to bed and ambulated within the room.
Diet/Nutrition: Normal diet/Regular	The patient ate all of his lunch except for a little bit of his baked potato.
Frequent Assessments: Vitals q4h, glucose	Vitals have been stable, blood sugars stable,

q2h, urine pH with each void	urine pH shows no ketones.
Labs/Diagnostic Tests: GPP	The GPP was collected around 1330, results were not available while I was there.
Treatments:	None
Other:	n/a
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
BMP	BMP was collected at 1600, results were not read by the doctor and the patient was discharged home. The results were not in Epic during my shift.

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 (specific to the age of the child)	Admission or Prior Value	Today's Value	Reason for Abnormal Value

RBC	4.1-5.2	5.11	n/a	
Hgb	10-15.5	13.8	n/a	
Hct	40-54	42	n/a	
Platelets	145-375	371	n/a	
WBC	4.5-13.5	7.2	n/a	
Neutrophils	40-59	59	n/a	
Lymphocytes	33-48	27	n/a	Autoimmune diseases and infections can cause leukopenia (Pagana et al., 2021). This patient has both, type 1 diabetes mellitus and viral gastroenteritis.
Monocytes	2-10	10	n/a	
Eosinophils	0-5	3	n/a	
Basophils	0-2	1	n/a	
Bands	0-10	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 or Prior Value	Today's Value	Reason For Abnormal
Na-	**136-145**	**n/a**	**140**	
K+	**3.5-5.1**	**n/a**	6.9	Potassium can be elevated due to infection or because of IV medications (Pagana et al., 2021). In my patient's case, he does have an infection, but he was also receiving IV fluids with 20 mEq KCl. When the lab was drawn, it was drawn from the IV site and if there was not enough blood wasted before testing, there would still be IV fluid in the blood that was tested.

Cl-	**98-107**	**n/a**	112	Too much saline solution can cause elevated chloride levels (Pagana et al., 2021). In my patient's case, the lab was drawn from the IV site and if there was not enough blood wasted before testing, it would have IV fluid mixed in with it.
Glucose	74-100	n/a	202	Diabetes mellitus and infections cause elevated glucose levels (Pagana et al., 2021). My patient has both, type 1 diabetes mellitus, and viral gastroenteritis.
BUN	8-21	n/a	7	Malnutrition is a cause for decreased BUN (Pagana et al., 2021). My patient has been experiencing decreased appetite for the past several days which is likely the cause for his slightly decreased BUN.
Creatinine	0.55-1.3	n/a	0.63	
Albumin	3.8-5.4	4.3	n/a	
Total Protein	6-8	n/a	n/a	
Calcium	8.9-10.6	n/a	8	Albuterol and corticosteroids can cause hypocalcemia (Pagana et al., 2021). My patient uses an albuterol inhaler, and he also takes Advair which contains corticosteroids.
Bilirubin	0.2-1.3	0.6	n/a	
Alk Phos	100-390	237	n/a	
AST	14-59	29	n/a	
ALT	4-49	16	n/a	
Amylase	30-115	n/a	n/a	
Lipase	7-59	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	Admission or Prior Value	Today's Value	Reason for Abnormal
ESR	3-15	n/a	n/a	
CRP	0-0.29	n/a	n/a	
Hgb A1c	<7.5%	n/a	n/a	
TSH	0.66-4.14	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	Admission or Prior Value	Today's Value	Reason for Abnormal
Color & Clarity	Yellow, clear	Yellow, clear	n/a	
pH	5-8	6.0	n/a	
Specific Gravity	1.006-1.029	1.015	n/a	
Glucose	negative	negative	n/a	
Protein	negative	negative	n/a	
Ketones	negative	>80	n/a	Hyperglycemia causes ketones to be present in urine. A large number of ketones in the urine is also a sign of ketoacidosis (Pagana et al., 2021). My patient had an elevated blood glucose level when he was admitted but the only number on the chart was 202 on 6/1, which is consistent with having ketones in his urine. The pH level was checked throughout the day with each void and when his blood sugars were within normal range, there was no ketones present.
WBC	negative	n/a	n/a	

RBC	negative	negative	n/a	
Leukoesterase	negative	negative	n/a	

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

Test	Normal Range	Admission or Prior Value	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		Obtained but no results currently	
Respiratory ID Panel	Negative	n/a	n/a	
COVID-19 Screen	negative	Negative	n/a	

****Normal lab values obtained from Epic chart except ESR, CRP, Hgb A1c, and TSH which were obtained from *Mosby's diagnostic and laboratory test reference (2021)*.**

Lab Correlations Reference (1) (APA):

Pagana, K.D., Pagana, T. J., Pagana, T.N. (2021). *Mosby's diagnostic and laboratory test reference* (15th ed). Elsevier

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Since this patient has a history of asthma if he were to have an exacerbation a chest x-ray, CT or MRI would be ordered.

Diagnostic Test Correlation (5 points):

X-rays are used to view the chest and lungs and help with making a diagnosis. When further images with detailed, cross-sectional views are needed, CT scans or MRIs are done (Capriotti, 2020).

Diagnostic Test Reference (1) (APA):

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

Current Medications (8 points)
****Complete ***ALL*** of your Client's medications****

Brand/ Generic	Advair Diskus/fluticasone propionate-salmeterol inhalation powder	HFA/albuterol sulfate inhalation powder	Glutose/dextrose	Humalog/insulin lispro	
Dose	115 mcg fluticasone propionate, 21 mcg salmeterol 2 puffs	2 puffs	15 g	3 mL prefilled cartridges are used in the patient's insulin pump. The dosage given is dependent upon his needs.	
Frequency	BID	Q4h PRN	One time	PRN	
Route	inhalation	inhalation	oral	subcutaneous	
Classification	Antiasthmatic/ corticosteroid	Adrenergic/ bronchodilator	Carbohydrate/ glucose-elevating agent	Antidiabetics/insulins	
Mechanism of Action	Fluticasone is a synthetic corticosteroid that is an anti-inflammatory, and Salmeterol is a beta-agonist that relaxes bronchial smooth muscles	Attaches to beta receptors on bronchial cell membranes decrease intracellular calcium levels and relaxes	Absorbed directly into the bloodstream from the intestines and is distributed, stored, or used in the liver. Promotes glycogen	Lowers blood glucose levels by binding to insulin receptors	

		smooth-muscle cells	deposition and prevents or decreased ketosis		
Reason Client Taking	Maintenance for prevention of asthma exacerbation	To prevent an asthma attack used as a rescue inhaler	Treatment of hypoglycemia	Glycemic control for diabetes mellitus	
Concentration Available	115 mcg fluticasone propionate, 21 mcg salmeterol	1 inhalation every 4 hours or 2 inhalations every 4-6 hours	10-20 g oral gel repeated in 10-20 min as needed based on serum glucose level	3 mL prefilled cartridge 10 mL vial	
Safe Dose Range Calculation	Children 12 and older 1 inhalation BID 12 hours apart	1 inhalation every 4 hours or 2 inhalations every 4-6 hours	Children over 6 months 10-20 g/dose	Insulin dosages vary based on the patient's need. Insulin requirements can vary when the patient is sick or experiencing emotional distress. The insulin pump can be adjusted according to need and based on the Dexcom reading	
Maximum 24-hour Dose	1 inhalation of fluticasone 500 mcg x 2 = 1000 mcg, and salmeterol 50 mcg x 2 = 100 mcg	1 inhalation every 4 hours 1x6 = 6 puffs or 2 inhalations every 4-6 hours 2x4 = 8 puffs 2x6 = 12 puffs	No maximum dose, given until the desired serum blood glucose level is reached	No maximum dose, given until the desired serum blood glucose level is reached	
Contraindications (2)	Hypersensitivity to milk proteins, hypersensitivity to drugs or their components	Hypersensitivity to albuterol or its components, Use cautiously in patients with diabetes mellitus	Glucose-galactose malabsorption syndrome, severe dehydration	Contraindicated during hypoglycemic episodes, Should be used with caution in patients who are susceptible to hypokalemia	
Side Effects/	Headache, palpitations	Angina hypotension	Bronchospasm, electrolyte	Hypoglycemia hypokalemia	

Adverse Reactions (2)			deficits		
Nursing Considerations (2)	Monitor patient for urticaria, angioedema, rash, or other signs of hypersensitivity Do not use this drug to stop an asthma attack	Monitor serum potassium level as albuterol can cause transient hypokalemia, Drug tolerance can develop with prolonged use	Monitor liver function including ammonia levels regularly, Assess blood glucose level frequently to determine the effectiveness	Monitor blood glucose level and adjust insulin dosage as needed, monitor patients at risk for DKA due to illness or infection	
Client Teaching needs (2)	Rinse mouth after inhalation to prevent oral candidiasis Do not exceed the recommended dose	Shake canister before use, Wash the mouthpiece once a week and let it air dry	Swallow oral dextrose, Monitor blood glucose level as directed	Keep a log of glucose levels, Rotate injection sites	

Medication Reference (1) (APA):

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

Assessment

Physical Exam (18 points) Highlight Abnormal Pertinent Assessment Findings

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	A&O x4 No acute distress This patient has greasy, dirty hair and is slightly disheveled, he has not showered since admission.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:**	Pink Dry Warm Skin turgor has immediate recoil No rashes, bruises or wounds noted

Rashes: **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:** **IV Assessment (If applicable to child):** **Size of IV:** **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:** **IV Fluid Rate or Saline Lock:**	20, patient often changes positions independently and walks in the room, he has no sensory deficit, skin is usually dry, and he is eating more than half of his meals. No drains present Left posterior hand – 20 g 5/31/22 Patent flushed well after drawing blood for BMP No signs of erythema Clean, dry, and intact 0.9% NaCl with Kcl 20 mEq 100 ml/hr continuous
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	Head and neck are symmetrical, trachea is without deviation. No lymphadenopathy noted or palpated, thyroid is non palpable. Ears are symmetrical, and pink without any drainage, no hearing deficit. Sclera is white, conjunctiva is pink with no draining and EOMs symmetrical. Dentation is good .
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 & S2 heart sounds, no audible murmur, gallup or rubs noted. Pulse is 2+ throughout bilaterally Cap refill is less than 3 seconds No JVD or edema noted, or palpated
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Breath sounds are even, regular and nonlabored bilaterally, without crackles, wheezing or rhonchi
GASTROINTESTINAL: **Diet at home:** **Current diet:** **Height (in cm):** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:**	Regular Regular 164 cm Normoactive in all four quadrants Last BM 6/1/22 Abdomen soft, and nontender to palpation. No masses, or pain noted. No distention No incisions No scars

Scars: **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	No abdominal drains No abdominal wounds Insulin pump is on the lower right quadrant
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Yellow Clear 900 cc Genitals free of rashes and lesions
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) X☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	Patient has full ROM in upper and lower extremities He is able to perform all ADLs without assistance His fall score is 2, he is independent and up ad lib, he does not need assistance with equipment or support to stand and walk
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient has firm and equal grips bilaterally Firm and equal pedal pushes and pulls bilaterally. He has full ROM in all extremities A&O x4 Clear speech Sensory response in all extremities is normal He is fully alert
PSYCHOSOCIAL/CULTURAL: **Coping method(s) of caregiver(s):** **Social needs (transportation, food, medication assistance, home equipment/care):**	Patient lives with his mom, stepdad and older brother. His mom was present and very knowledgeable, nurturing, and attentive to him. He enjoys school, works well with the school nurse in managing the DM. His grandparents and

Personal/Family Data (Think about home environment, family structure, and available family support):	older sister also get alerts from his Dexcom and help monitor him as needed.

Vital Signs, 2 sets – (2.5 points) Highlight All Abnormal Vital Signs

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1200	87	n/a	18	98.4 Oral	96 RA
1600	82	124/58	18	98.5 Oral	97 RA

Vital Sign Trends: His vital signs were stable throughout my shift and he reports no pain.

Normal Vital Sign Ranges (2.5 points)
****Need to be specific to the age of the child****

Pulse Rate	50-100
Blood Pressure	110-131/64/83
Respiratory Rate	16-20
Temperature	97.9-99.1 F
Oxygen Saturation	95-100%

Normal Vital Sign Range Reference (1) (APA):

Holman, H.C., Williams, D., Sommer, S., Johnson, J., Wheless, L., Wilford, K., & McMichael, M. G. (2019). *RN nursing care of children review module* (11th ed.). Assessment Technologies Institute, LLC.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

1600	Numeric 0/10	n/a	n/a	n/a	No pain
Evaluation of pain status *after* intervention	n/a	n/a	n/a	n/a	Watching TV Playing video games Clustering care
Precipitating factors: This patient verbalized that he was not experiencing any pain or discomfort. He was content watching TV and playing video games and we clustered care to minimize interruption and allow him and his mom to rest. **Physiological/behavioral signs:** His vital signs were within normal range, and no elevations, no facial grimace, or nonverbal signs of pain or discomfort were displayed.					

Intake and Output (1 points)

Intake (in mL)	**Output (in mL)**
240 mL apple juice 240 mL pop 100 mL x 6hr = 600 mL IV fluids	400 – urine 500 - urine

Developmental Assessment (6 points)
Be sure to highlight the achievements of any milestone if noted in your child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading

Age Appropriate Growth & Development Milestones

1. Adolescent males begin increasing muscle mass, and generally stop growing between 13 ½ and 17 ½ (Ricci et al., 2021). Males at this stage should be between 132 – 176.8 cm tall and weigh between 35.3 -95.76 kg (Ricci et al., 2021). This adolescent male is 13 years and 6 months old, he is 164 cm and weighs 76.4 kg. He has achieved this milestone and still has time to grow more.
2. Respiratory rate decreases to 15-20 breaths per minute (Ricci et al., 2021). This adolescent male had a respiratory rate of 18 during my assessment.

3. The size of the heart increases resulting in an increase in blood pressure and a decrease in heart rate (Ricci et al., 2021). This adolescent male had a blood pressure of 124/58 and a pulse of 82 during my assessment.

Age Appropriate Diversional Activities

1. Watching television
2. Playing video games
3. Reading a book

Psychosocial Development:

Which of Erikson's stages does this child fit? This patient is in the identity vs role confusion stage (Holman et al., 2019).

What behaviors would you expect? Adolescents in this stage are influenced by their peer groups (Holman et al., 2019). In this stage, they are learning who they are and will try different roles as a way of figuring out their identity and uniqueness (Ricci et al., 2021). Adolescents start to become more independent (Holman et al., 2019).

What did you observe? This patient was able to communicate clearly and explain how he was feeling, and how he watches his diet, tracks his carbohydrate intake, and monitors his glucose levels. He continues to communicate with his mom in managing his care. He has a good understanding of his autoimmune disease and what he needs to do to manage it. He works closely with the school nurse and communicates effectively to manage his diabetes at school.

Cognitive Development:

Which stage does this child fit, using Piaget as a reference? This patient is in the formal operations stage (Holman et al., 2019).

What behaviors would you expect? In this stage it is expected that the patient would be able to use formal logic to make decisions, think in hypothetical situations and stay focused and attentive for longer periods of time (Holman et al., 2019).

What did you observe? This patient was attentive and involved in his care and conversations with me, his primary nurse, and his mom. He has a good understanding of his autoimmune disease and was able to explain the insulin pump and Dexcom to me.

Vocalization/Vocabulary:

Development expected for child's age and any concerns? There was no indication of any developmental delays. He was able to communicate well and appropriately for his age.

Any concerns regarding growth and development? There are no concerns regarding his growth and development. He is 13 years old and 6 months and will be in the formal operations stage until age 20 (Holman et al., 2019).

Developmental Assessment Reference (1) (APA):

Holman, H.C., Williams, D., Sommer, S., Johnson, J., Wheless, L., Wilford, K., & McMichael, M. G. (2019). *RN nursing care of children review module* (11th ed.). Assessment Technologies Institute, LLC.

Ricci, S.S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing (4th ed.).* Wolters Kluwer.

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

The goaling	Rational	Interventions	Outcomes	Evaluation

Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client.	• Explain why the nursing diagnosis was chosen	**(2 per dx)**		• How did the Client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for unstable glucose levels related to impaired nutrition due to illness as evidenced by decreased appetite, vomiting, and diarrhea	Glucose levels that drop too low can cause seizures or coma, and levels that are too high can cause DKA which is life-threatening.	**1.**Monitor glucose level every 2 hours **2.** Check ketones with every void	**1.** Glucose levels will remain stable, and urine will be without ketones	Goal was partially met. The glucose was monitored every two hours, and he was alerted to the onset of a hypoglycemic event. He was given apple juice to stabilize his blood glucose. The pH was checked with each void and no ketones were present.
2. Risk for fluid and electrolyte imbalance related to dehydration as evidenced by hyperglycemia, vomiting, and diarrhea	He has been having diarrhea and vomiting for several days causing dehydration	**1.** Monitor all intake and output **2.** Monitor labs for changes in electrolytes	**1.** Patient will be well hydrated, and his electrolyte labs will be within normal range	Goal was met. IV fluids were administered continuously at a rate of 100 mL/hr. Patient voided a total of 900 cc during my shift. A BMP was collected at 1600 and the doctor reviewed the labs and discharged the patient
3. Risk for infection related to elevated glucose levels as evidenced by an existing	This patient is already experiencing a weakened immune system due to having a viral	**1.** Monitor vital signs every four hours **2.** Monitor for signs of	**1.** Vital signs will remain stable and patient will not show any signs	Goal met. Patient's vital signs remained stable throughout my shift. He did not show any signs of infection, lung sounds were clear

viral illness	illness which makes him more susceptible to infection	respiratory infection, new onset of cough, fever, and auscultate lungs for changes in lung sounds	of infection while in the hospital	and free of crackles, rhonchi and stridor.
4. Imbalanced nutrition, less than body requirements related to inadequate dietary intake as evidenced by decreased appetite, vomiting, and diarrhea	Proper nutrition is important in helping to maintain stable glucose levels and aids in recovering from illness	**1.** Monitor daily intake of food and liquids **2.** Encourage patient to start eating since vomiting and diarrhea has subsided	**1.** Patient will be able to eat more than 50% of his meals and will not have any episodes of diarrhea or vomiting	Goal met on my shift. Patient ordered lunch and ate everything but a little bit of his baked potato. He has increased his fluid intake and has not had any more episodes of vomiting or diarrhea

Other References (APA):

Phelps, L. L. (2021). *Sparks & Taylor's nursing diagnosis pocket guide*. Wolters Kluwer.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Elsevier.

Concept Map (20 Points):

Subjective Data

Patient's chief complaints: Diarrhea, vomiting, and loss of appetite for the past several days
He reported having some abdominal pain at home but no pain since he has been in the hospital
Patient is voiding regularly, and his last bowel movement was on 6/1/22

Nursing Diagnosis

1.Risk for unstable glucose levels related to impaired nutrition due to illness as evidenced by decreased appetite, vomiting, and diarrhea
Outcome: Glucose levels will remain stable, and urine will be without ketones

2.Risk for unstable glucose levels related to impaired nutrition due to illness as evidenced by decreased appetite, vomiting, and diarrhea
Outcome: Patient will be well hydrated, and his electrolyte labs will be within normal range

3. Risk for infection related to elevated glucose levels as evidenced by an existing viral illness
Outcome: Vital signs will remain stable, and patient will not show any signs of infection while in the hospital

4. Imbalanced nutrition, less than body requirements related to inadequate dietary intake as evidenced by decreased appetite, vomiting, and diarrhea
Outcome: Patient will be able to eat more than 50% of his meals and will not have any episodes of diarrhea or vomiting

Objective Data

Vital signs: pulse 82, blood pressure 124/58, respirations 18, oral temperature 98.5, oxygen saturation 97% on room air
Medications: albuterol, Advair, insulin Humalog, glutose
Lymphocytes 27
Calcium 8
BUN 7
Glucose 202

Client Information

On 5/31/22 this 13-year-old male with a past medical history of asthma and type 1 diabetes mellitus was transported to Carle by ambulance for vomiting, diarrhea, elevated blood glucose, and a high number of ketones in his urine. He was admitted to pediatrics and started on IV fluids

Nursing Interventions

1. Monitor glucose level every 2 hours

2. Check ketones with every void
1. Monitor all intake and output

2. Monitor labs for changes in electrolytes
1. Monitor vital signs every four hours
2. Monitor for signs of respiratory infection, new onset of cough, fever, and auscultate lungs for changes in lung sounds

1. Monitor daily intake of food and liquids
2. Encourage patient to start eating since vomiting and diarrhea has subsided