N431 Care Plan #2

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
4/04/2024	A. N.	41 years old	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Black/African American	Unemployed	Single	Baby Powder (pure corn starch)
Code Status	**Height**	**Weight**	
Full Code	3’ 10” (116.8 cm)	87 lbs. 14.4 oz. (39.9 kg)	

Medical History (5 Points)

Past Medical History: Cerebral palsy, asthma, anemia, acute on chronic hypercapnia, gastroesophageal reflux disease (GERD), hydrocephalus, scoliosis, pancreatitis, seizures, and epilepsy.

Past Surgical History: Colonoscopy (4/1/24), upper gastrointestinal endoscopy (4/1/24), endoscopy (4/1/24), IR ultrasound venous access (10/27/23), Port placement and port removal (10/27/23), and ventriculoperitoneal shunt (date unknown).

Family History: Father has asthma and is currently alive. Mother is currently alive. The client’s mother noted no other family medical history due to the client being nonverbal.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The client has no history or current use of tobacco products, alcohol, or drugs in her lifetime.

Assistive Devices: A lift to help move her due to the patient’s immobile status.

Living Situation: The client is a resident and is cared for at the Swann Special Care Center in Champaign, IL. The client’s mother and father are active in her life.

Education Level: No education due to the client’s mental and physical disability.

Admission Assessment

Chief Complaint (2 points): Episode of apnea

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

The onset of the client's symptoms began on the night of April 2, 2024. The client's symptoms were located in her respiratory system. The symptoms went on for about 2 days, gradually becoming worse on April 4, 2024, when her care providers at Swann Special Care Center decided to call for emergency medical services to take her to the emergency department. The client's symptoms include episodes of apnea, hypoxia, and cyanosis. The location of the cyanosis was not recorded in her electronic health record, and due to the client's nonverbal status, this information was unattainable. The client has a standing order for the use of a CPAP machine at night to help her sleep and maintain her airway. However, Swann Special Care Center was unable to adjust her CPAP settings to the newly prescribed settings her provider ordered on April 2, 2024. The client's inability to use her CPAP at night when she sleeps led to aggravation of her symptoms. Swann Special Care Center attempted to relieve her symptoms by placing her CPAP on her with her old settings when her symptoms were already aggravated, but this only helped a little by raising her oxygen saturation into the 80s. The care providers called emergency medical services once they could see that the CPAP machine wasn't going to be enough. Once the client arrived at the emergency department, she was placed on high-flow oxygen via nasal cannula at 15 L/min; vitals were taken, arterial blood gasses, urinalysis, and blood culture were obtained and sent to the lab, and chest X-ray was performed and showed mild fluid overload. Due to the patient being nonverbal, staff used the FLACC scale, and they determined the patient wasn't in any pain. The mother agreed with the emergency department's pain assessment of her daughter.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute respiratory failure with hypoxia

Secondary Diagnosis (if applicable): No secondary diagnosis

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

Respiratory failure can be caused by various disorders and diseases that affect the lungs. “Respiratory failure occurs when the pulmonary system fails to oxygenate the blood or fails to sufficiently eliminate carbon dioxide” (Capriotti, 2020). Depending on the onset and duration of the illness will determine if it is acute respiratory failure or chronic respiratory failure. This patient was diagnosed with acute respiratory failure, meaning it came on suddenly and shouldn’t last very long compared to chronic. There are two different classifications of respiratory failure, hypoxemic and hypercapnic respiratory failure (Cleveland Clinic Medical Professional, 2023). “Hypercapnic respiratory failure occurs when carbon dioxide in arterial blood ($PaCO_2$) is greater than 50 mm Hg” (Capriotti, 2020). The patient was experiencing hypercapnic respiratory failure due to her ABG levels showing a $PaCO_2$ level of 64.8 mm Hg. A patient experiencing hypercapnic respiratory failure will exhibit a typical increase in $PaCO_2$ and a decrease in their PaO_2 levels, just like this patient.

Individuals experiencing respiratory failure may appear distressed, they may need to use accessory muscles to breathe, and they will have a hard time trying to maintain a regular respiration rate even though they may be receiving supplemental oxygen. Signs and symptoms of respiratory failure can include the following: dyspnea upon exertion, hypoxia, ankle edema, crackles in the lungs can be heard, chronic cough, and others, depending on whether you have a preexisting cardiac condition or specific respiratory disorders such as COPD and asthma

(Capriotti, 2020). The client was experiencing hypoxia and ankle edema upon her arrival at the emergency department. The client had also experienced episodes of apnea and cyanosis.

There are several labs and diagnostic tests that are utilized to help diagnose respiratory failure. Those tests include arterial blood gases (ABGs), culture and sensitivity tests, chest X-rays, computerized tomography (CT) scans, magnetic resonance imaging (MRI), and a V-Q scan (Capriotti, 2020). The client had her ABGs taken on a routine basis to monitor her levels closely. While the patient was in the emergency department, the patient had a chest X-ray performed. The chest X-ray results showed vascular fullness in the left lung, which can indicate some type of infection, but no presence of pneumonia since no signs of infiltrates were found. The client had a blood culture performed, but the results showed no growth.

Treatment of respiratory failure includes several medications such as bronchodilators, antibiotics, anticoagulants, decongestants, antihistamines, antitussives, mild analgesics, and a warm saltwater gargle (Capriotti, 2020). This client received several of the medications previously listed, such as, Atrovent HFA (bronchodilator), tobramycin (antibiotic), Lovenox (anticoagulant), Allegra (antihistamine), ibuprofen (mild analgesic). The client also received nebulizer treatments periodically to help loosen the secretions inside her lungs. This list does not cover all of the medications the client was being treated with at the hospital, but it covers a good majority of them. Other non-medicinal treatments for respiratory failure can include suctioning of the airways, chest physiotherapy, incentive spirometry, nasotracheal suction, percussion over the chest, positioning of the client, and supplemental oxygen (Capriotti, 2020). The client received suctioning of the airways, supplemental oxygen, and positioning of the client as other forms of treatment. The other forms of treatment, such as chest physiotherapy, incentive

spirometry, and percussion over the chest, are not feasible with this client due to her mental and physical disabilities.

Pathophysiology References (2) (APA):

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

Cleveland Clinic Medical Professional. (2023, March 15). *Respiratory failure*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/24835-respiratory-failure

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	3.50 – 5.20 10^6/uL	3.78 10^6/uL	3.74 10^6/uL	
Hgb	11.0 – 16.0 g/dL	10.4 g/dL	10.4 g/dL	This patient has been diagnosed with anemia. Anemia has been known to cause decreased levels of hemoglobin (Pagana et al., 2020).
Hct	34.0 – 47.0%	34.0%	34.0%	
Platelets	140 – 400 10^3/uL	307 10^3/uL	333 10^3/uL	
WBC	4.0 – 11.0 10^3/uL	7.35 10^3/uL	4.98 10^3/uL	
Neutrophils	1.60 – 7.70 10^3/uL	4.23 10^3/uL	2.60 10^3/uL	
Lymphocytes	1.0 – 4.9 10^3/uL	2.57 10^3/uL	1.90 10^3/uL	
Monocytes	0.00 – 1.10 10^3/uL	0.43 10^3/uL	0.37 10^3/uL	
Eosinophils	0.00 – 0.50 10^3/uL	0.07 10^3/uL	0.07 10^3/uL	
Bands	0.00 – 10.0%	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-	136 – 145 mmol/L	140 mmol/L	136 mmol/L	
K+	3.5 – 5.1 mmol/L	3.8 mmol/L	4.8 mmol/L	
Cl-	98 – 107 mmol/L	100 mmol/L	93 mmol/L	The client has mild fluid volume overload which is evident by the edema located in her lower legs bilaterally. Overhydration has been known to cause a decreased level of chloride (Pagana et al., 2020). Overhydration is synonymous with fluid volume overload.
CO2	22.0 – 29.0 mmol/L	34.0 mmol/L	34.0 mmol/L	Several medications have been known to cause an increased level of CO_2 in the blood. One type of medication that can increase a patient's CO_2 level are barbiturates (Pagana et al., 2020). The client takes phenobarbital which is a barbiturate twice a day.
Glucose	74 – 100 mg/dL	82 mg/dL	100 mg/dL	
BUN	7 – 19 mg/dL	4 mg/dL	19 mg/dL	Upon arrival to the emergency department the patient was deemed to have mild fluid volume overload. A decreased BUN level has been associated with overhydration due to fluid overload (Pagana et al., 2020).
Creatinine	0.55 – 1.02 mg/dL	0.45 mg/dL	0.49 mg/dL	A decreased level of creatinine has been associated with patients who are experiencing a decrease in muscle mass such as muscular dystrophy (Pagana et al., 2020). The patient is immobile and bedridden with all four limbs that have contractures present, this will cause the patient to chronically have decreased muscle mass.

Albumin	3.5 – 5.0 g/dL	3.1 g/dL	3.5 g/dL	The client had a chest X-ray performed while in the emergency department. The chest X-ray found vascular fullness in the left lung, which could suggest an acute infection in the lung. A slightly decreased level of albumin can be caused by an acute infection (Pagana et al., 2020).
Calcium	8.9 – 10/6 mg/dL	8.7 mg/dL	10.1 mg/dL	Several medications can cause a decreased level of calcium. A few medications that specifically decrease the calcium level include albuterol and anticonvulsants (Pagana et al., 2020). The client takes albuterol as needed and levetiracetam, which is an anticonvulsant twice a day.
Mag	1.6 – 2.6 mg/dL	1.6 mg/dL	N/A	
Phosphate	2.3 – 4.7 mg/dL	2.1 mg/dL	2.1 mg/dL	Several medications can cause a decreased level of phosphate. Albuterol has been known to cause a decreased level of phosphate (Pagana et al., 2020). The client has an order for albuterol every 4 hours as needed.
Bilirubin	0.2 – 1.2 mg/dL	0.2 mg/dL	0.2 mg/dL	
Alk Phos	40 – 150 U/L	104 U/L	101 U/L	
AST	5 – 34 U/L	22 U/L	14 U/L	
ALT	0 – 55 U/L	17 U/L	17 U/L	
Amylase	30 – 220 U/L	N/A	N/A	
Lipase	8 – 78 U/L	N/A	N/A	
Lactic Acid	0.50 – 2.20 mmol/L	N/A	0.59 mmol/L	
Troponin	0.00 – 0.03 ng/mL	N/A	N/A	

CK-MB	1.0 – 3.6 ng/mL	N/A	N/A	
Total CK	29 – 168 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	0.9 – 1.1 ratio	1.0 ratio	N/A	
PT	11.7 – 13.8 seconds	13.0 seconds	N/A	
PTT	22.4 – 35.9 seconds	26.8 seconds	N/A	
D-Dimer	< 250 ng/mL	N/A	N/A	
BNP	0.00 – 100.0 pg/mL	22.0 pg/mL	22.0 pg/mL	
HDL	> 55 mg/dL	N/A	N/A	
LDL	< 130 mg/dL	N/A	N/A	
Cholesterol	< 200 mg/dL	N/A	N/A	
Triglycerides	35 – 135 mg/dL	43 mg/dL	N/A	
Hgb A1c	4.0 – 7.0%	N/A	N/A	
TSH	0.350 – 4.940 U[IU]/mL	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	Colorless – Yellow & Clear	Yellow & clear	N/A	
pH	5.0 – 7.0	6.5	N/A	

Specific Gravity	1.003 – 1.035	1.011	N/A	
Glucose	Negative	Negative	N/A	
Protein	Negative	Negative	N/A	
Ketones	Negative	Negative	N/A	
WBC	0 – 25 /uL	5 /uL	N/A	
RBC	0 – 20 /uL	< 2 /uL	N/A	
Leukoesterase	Negative	Negative	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	7.310 – 7.410	7.391	7.391	
PaO2	35.0 – 45.0 mm Hg	41.4 mm Hg	41.4 mm Hg	
PaCO2	41.0 – 51.0 mmol/L	64.8 mmol/L	64.8 mmol/L	The patient's body is showing partial compensation by raising the bicarbonate level to decrease the carbon dioxide level (Pagana et al., 2020). Partial compensation should eventually lead to full compensation leading to the values of the PaCO2 and HCO3 being within normal reference ranges.
HCO3	21.5 – 25.5 mmol/L	38.4 mmol/L	38.4 mmol/L	The patient's body is showing partial compensation by raising the bicarbonate level to decrease the carbon dioxide level (Pagana et al., 2020). Partial compensation should eventually lead to full compensation leading to the values of the PaCO2 and HCO3 being within normal reference ranges.
SaO2	95 – 100%	N/A	98%	

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	No growth/ Negative	No growth	N/A	
Sputum Culture	Norma upper respiratory tract	N/A	N/A	
Stool Culture	Normal intestinal flora	N/A	N/A	

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

The client had a chest X-ray performed while in the emergency department on 4/4/2024.

Diagnostic Test Correlation (5 points):

The chest X-ray displayed vascular fullness located on the left side of the chest, but no focal infiltrates were observed. The client had the chest X-ray performed due to her signs and symptoms, including an episode of apnea, hypoxia, and cyanosis. She also was discharged from Carle on April 2nd for having pneumonia. The chest X-ray can be utilized to confirm if signs of pneumonia are still present (Pagana et al., 2020). Based on the chest X-ray results, no infiltrates were found in the lungs, which means there is no pneumonia currently active in the patient.

Diagnostic Test Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Mosby.

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

Home Medications (5 required)

Brand/ Generic	Valium/ diazepam	Solfoton/ phenobarbital	Miralax/ polyethylene glycol	Lopressor/ metoprolol tartrate	Allegra/ fexofenadine
Dose	2 mg	64.8 mg	17 g	50 mg	180 mg
Frequency	Once daily	BID	Every other night at bed time	BID	Once daily
Route	Administer via G-Tube	Administer via G-Tube	Administer via G-Tube	Administer via G-Tube	Administer via G-Tube
Classification	Pharmacological class: Benzodiazepine Therapeutic class: Anticonvulsant	Pharmacological class: Barbiturate Therapeutic class: Anticonvulsant	Pharmacological class: Laxative Therapeutic class: Osmotic laxative	Pharmacological class: Beta$_1$-adrenergic blocker Therapeutic class: Antihypertensive/antianginal	Pharmacological class: H-2 receptors Therapeutic class: Antihistamine
Mechanism of Action	"May potentiate effects of GABA and other inhibitory neurotransmitters by binding to specific benzodiazepine receptors in cortical and limbic	"Phenobarbital increases the amount of time chloride channels are open, consequently depressing the central nervous system. This action	"Polyethylene glycol (PEG) is soluble in water and is minimally absorbed in the gastrointestinal tract as a medication. PEG forms hydrogen bonds with water molecules. For	"Inhibits stimulation of beta$_1$-receptor sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand" (Jones & Bartlett Learning,	"Acts on blood vessels, GI, respiratory system by competing with histamine for H_1-receptor site; decreases allergic response by blocking

	areas of CNS. GABA inhibits excitatory stimulation, which helps control emotional behavior. Limbic system contains a dense area of benzodiazepine receptors, which may explain drug's antianxiety effects" (Jones & Bartlett Learning, 2022).	occurs by acting on GABA-A receptor subunits. When phenobarbital binds to these receptors, the chloride ion gates open and stay open, allowing a steady flow of these ions into neuronal cells. This action hyperpolarizes the cell membrane, increasing the action potential threshold" (Lewis & Adams, 2022).	this reason, it can prevent the reabsorption of water, which causes water retention in the stool and increases the osmotic pressure. As a result, the stool softens, and bowel movements occur more frequently" (Dabaja et al., 2023).	2022).	pharmacologic effects of histamine, less sedating" (Skidmore-Roth, 2020).
Reason Client Taking	The client has a history of seizures. The client is taking this medication to prevent seizures from occurring.	The client has a history of seizures. The client is taking this medication to prevent seizures from occurring.	The client takes this medication once every other night at bedtime to prevent constipation since she is immobile and incontinent.	The client is taking this medication to help control pain associated with the chest that may be caused by respiratory issues. This medication can help with anginal pain, which can be associated with	The client is taking this medication to help control basic allergies like seasonal allergies that may rise up on a daily basis.

				respiratory pain.	
Contraindications (2)	1. This medication is contraindicated for patients who have acute angle-closure glaucoma (Jones & Bartlett Learning, 2022). 2. This medication is contraindicated in patients who have a hypersensitivity to diazepam (Jones & Bartlett Learning, 2022).	1. This medication is contraindicated with patients who have COPD (Multum, 2024). 2. This medication is contraindicated in patients who have "a history of addiction to phenobarbital or similar medicine (Valium, Xanax, Ativan, and others)" (Multum, 2024).	1. This medication is contraindicated for patients who have a suspected bowel obstruction, a perforated bowel, or an inflamed bowel disease (Dabaja et al., 2023). 2. This medication is contraindicated in patients who are experiencing appendicitis (Dabaja et al., 2023).	1. This medication is contraindicated for patients who have sinus bradycardia (Jones & Bartlett Learning, 2022). 2. This medication is contraindicated for patients who have 2nd or 3rd degree heart blocks (Jones & Bartlett Learning, 2022).	1. This medication is contraindicated for patients who have a hypersensitivity to fexofenadine (Skidmore-Roth, 2020). 2. This medication is used with precaution for patients who are pregnant (Skidmore-Roth, 2020).
Side Effects/Adverse Reactions (2)	1. Respiratory depression 2. Hypotension	1. Dizziness 2. Lack of energy	1. Stomach cramps 2. Rectal hemorrhage	1. Arrhythmias 2. Bronchospasm	1. GI bleeding 2. Anemia
Nursing Considerations (2)	1. "Expect to give a lower diazepam dose to a patient	1. This medication should not be administe	1. The nurse should monitor the patient's electrolyte levels	1. Assess daily weight, intake and ouput; check the patient for	1. Assess the patient for symptoms of

	with chronic respiratory insufficiency because of the risk of respiratory depression" (Jones & Bartlett Learning, 2022). 2. "Use diazepam with extreme caution in patients with a history of alcohol or drug abuse because it can cause physical and psychological dependence, and in patients with hepatic disorders such as hepatic fibrosis and	red intra-arterially, could cause thrombosis or an arteriospasm to occur (Multum, 2024). 2. While the patient is receiving this medication the nurse should assess and monitor the patient's weight, skin color, orientation, reflexes, auscultate bowel sounds, obtain vital signs, check for normal output, and obtain hepatic and renal function tests, and	periodically with long-term use and determine any imbalances (Dabaja et al., 2023). 2. "Pediatric patients on long-term use of PEG should also be monitored for neuropsychiatric events" (Dabaja et al., 2023).	symptoms of heart failure (JVD, weight gain, edema, crackles, and dyspnea) (Skidmore-Roth, 2020). 2. The nurse should be aware of abrupt withdrawal of this medication could "cause an MI, ventricular dysrhythmias, myocardial ischemia; taper dose over 7 - 14 days" (Skidmore-Roth, 2020).	pseudomembranous colitis including "diarrhea, abdominal pain, fever, fatigue, anorexia, anemia, elevated WBC and low serum albumin; product may be used in place of vancomycin; monitor CPC with differential and stool culture, not to bused for systemic infection; obtain C&S before use; monitor glucose; monitor fluid, and electrolyte depletion" (Skidmore-Roth,

	hepatitis because of potentially significant increase in drug's half-life" (Jones & Bartlett Learning, 2022).	glucose in the blood and urine (Multum, 2024).			2020). 2. Assess the patient for symptoms of hypersensitivity including pruritis, angioedema, and a rash (Skidmore-Roth, 2020).
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Obtain base line vitals especially blood pressure and respiratory status before administering this medication (Skidmore-Roth, 2020).	The nurse should assess the patient's respiratory status before administering this medication to know if there are any changes in breathing after administration (Multum, 2024).	The nurse should assess the patient for any signs of obstruction in the bowel before administering this medication (Dabaja et al., 2023).	Obtain base line levels of liver and kidney function tests before administering this medication (Skidmore-Roth, 2020).	Obtain cultures results before administering this medication (Skidmore-Roth, 2020).
Client Teaching Needs (2)	1. Educate the client that this medication is not meant to be taken for everyday	1. Educate the client that they may feel less anxious and drowsy after	1. Educate the client that they should experience a bowel movement within one to three days of taking the	1. Educate the client on the importance of taking this medication immediately after meals and right at bedtime to	1. Educate the client to report any bleeding from the gastrointestinal tract or

	stress or for longer than 4 months unless ordered otherwise by provider (Skidmore-Roth, 2020). 2. Educate the client that they should take this medication with food (Skidmore-Roth, 2020).	taking this medication (Multum, 2024). 2. Educate the client if they are using this medication for epilepsy that they should not discontinue or reduce their dose without speaking to their provider first; discontinuing this medication abruptly can increase the risk of seizures (Multum, 2024).	medication (Sinha, 2024). 2. Educate the client that they should not take this medication more than one time in a 24 hour period (Sinha, 2024).	avoid the symptoms of orthostatic hypotension (Skidmore-Roth, 2020). 2. Educate to the client that they should take their blood pressure and pulse while at home and when they should notify the prescriber (Skidmore-Roth, 2020).	abdominal pain (Skidmore-Roth, 2020). 2. Educate the client that they do not have to take this medication with food (Skidmore-Roth, 2020).

Hospital Medications (5 required)

Brand/ Generic	Lovenox/ enoxaparin	Singulair/ montelukast	Keppra/ levetiracetam	Tobi/ tobramycin	Atrovent HFA/ ipratrobium
Dose	30 mg	10 mg	1,250 mg	300 mg	3 mL

Frequency	Once daily	Once (at bedtime)	BID	BID	Q8hrs. (TID)
Route	Administer via G-Tube	Administer via G-Tube	Administer via G-Tube	Inhalation	Inhalation
Classification	Pharmacological class: Low-molecular-weight heparin Therapeutic class: Anticoagulant	Pharmacological class: Leukotriene receptor antagonist Therapeutic class: Antiasthmatic	Pharmacological class: Pyrrolidine derivative Therapeutic class: Anticonvulsant	Pharmacological class: Aminoglycoside Therapeutic class: Antibiotic	Pharmacological class: Anticholinergic Therapeutic class: Bronchodilator
Mechanism of Action	"Potentiates the action of antithrombin III, a coagulation inhibitor. By binding with antithrombin III, enoxaparin rapidly binds with an inactivates clotting factors (primarily factor Xa and thrombin). Without thrombin, fibrinogen can't convert to fibrin and thrombus can't form" (Jones & Bartlett Learning, 2022).	"Inhibits leukotriene formation; leukotrienes exert their effects by increasing neutrophil, eosinophil migration; aggregation of neutrophils, monocytes, smooth muscle contraction, capillary permeability; these actions further lead to bronchoconstriction, inflammation, and edema" (Skidmore-Roth, 2020).	"May protect against secondary generalized seizure activity by preventing coordination of epileptiform burst firing. Levetiracetam doesn't seem to involve inhibitory and excitatory neurotransmission" (Jones & Bartlett Learning, 2022).	"Interferes with protein synthesis in bacterial cell by binding to ribosomal subunits, thereby causing inaccurate peptide sequences to form in protein chain causing bacterial death" (Skidmore-Roth, 2020).	"After acetylcholine is released from cholinergic fibers, ipratropium prevents it from attaching to muscarinic receptors on membranes of smooth muscle cells, as shown here. By blocking acetylcholine's effects in bronchi and bronchioles, ipratropium relaxes smooth muscles

					and causes bronchodilation" (Jones & Bartlett Learning, 2022).
Reason Client Taking	This client is taking this medication to prevent the formation of any blood clots due to her immobile status.	The client has been diagnosed with asthma. This medication helps to control the patient's asthma.	The client has a history of seizures. The client is taking this medication to prevent seizures from occurring.	The client is taking this medication due to a possible infection found in the left lung indicated by the chest X-ray.	The client has dealt with breathing issues that cause bronchospasm. This medication helps to prevent bronchospasm.
Contraindications (2)	1. This medication is contraindicated for patients who have a hypersensitivity to pork (Skidmore-Roth, 2020). 2. This medication is contraindicated for patients who have bleeding disorders such as hemophilia or leukemia (Skidmore-	1. This medication is contraindicated in patients who have a hypersensitivity to montelukast (Skidmore-Roth, 2020). 2. This medication should be used with precaution for patients who are or plan to breastfeed (Skidmore	1. This medication is contraindicated in patients who have a hypersensitivity to levetiracetam (Skidmore-Roth, 2020). 2. This medication is contraindicated for patients who are breastfeeding (Skidmore-Roth, 2020).	1. This medication is contraindicated for patients who are pregnant (Skidmore-Roth, 2020). 2. This medication is contraindicated in patients who have sever kidney disease (Skidmore-Roth, 2020).	1. This medication is contraindicated in patients who have acute liver disease (Jones & Bartlett Learning, 2022). 2. This medication is contraindicated in patients who have a hypersensitivity to atropine and ipratropiu

	Roth, 2020).	-Roth, 2020).			m bromide (Jones & Bartlett Learning, 2022).
Side Effects/Adverse Reactions (2)	1. Hemorrhage 2. Thrombocytopenia purpura	1. Seizures 2. Pancreatitis	1. Hyponatremia 2. Acute kidney injury	1. Bronchospasm 2. Hypokalemia	1. Anxiety 2. Rash
Nursing Considerations (2)	1. A nurse should monitor a patient's anti-factor Xa levels that are receiving chronic therapy (Skidmore-Roth, 2020). 2. Assess the patient for "bleeding gums, petechiae, ecchymosis, black tarry stools, hematuria; notify prescriber" (Skidmore-Roth, 2020).	1. Assess the patient for the following respiratory symptoms, "wheezing, decrease in asthma exacerbations, rhinitis, and urticaria" (Skidmore-Roth, 2020). 2. Assess the patient for a known syndrome called Stevens-Johnson syndrome. Assess the patient for the following symptoms of that syndrome, "rash,	1. Assess the following for seizures "type, location, duration, character, intensity, precipitating factors; provide seizure precautions" (Skidmore-Roth, 2020). 2. Assess the following regarding mental status, "mood, sensorium, affect, behavioral changes, suicidal thoughts/behaviors; if mental status changes, notify prescriber"	1. Assess the patient's baseline muscle spasticity before and throughout treatment (Skidmore-Roth, 2020). 2. If the patient begins to experience dizziness, hallucinations, sedation effects, or psychosis this medication should be discontinued (Skidmore-Roth, 2020).	1. Assess "respiratory status: rate, rhythm, auscultate breath sounds before and after administration, vital capacity, FEV, ABGs/VBGs, heart rate and rhythm" (Jones & Bartlett Learning, 2022). 2. Assess patient for any palpitations while on this medication. If palpitations are severe,

		fever, blisters, fatigue, muscle/joint aches; if these occur, discontinue, provide supportive therapy" (Skidmore-Roth, 2020).	(Skidmore-Roth, 2020).		the medication may need to be discontinued for a different medication (Jones & Bartlett Learning, 2022).
Key Nursing Assessment(s) /Lab(s) Prior to Administration	Obtain base line levels for the patient's BUN and creatinine levels before administering this medication (Skidmore-Roth, 2020).	The nurse should assess respiratory status before administration of this medication to determine changes after medication is administered (Skidmore-Roth, 2020).	The nurse should verify baseline vitals have been obtained before administering this medication (Jones & Bartlett Learning, 2022).	Before administering this medication, you need to weigh the patient (Skidmore-Roth, 2020).	Assess respiratory status, specifically auscultating for breath sounds before and after administering this medication (Jones & Bartlett Learning, 2022).
Client Teaching Needs (2)	1. Educate the client to "use a soft-bristle toothbrush to avoid bleeding gums; to use electric razor" (Skidmore-Roth, 2020). 2. Educate the client that	1. Educate the client that they should still take this medication if no symptoms are present at the time of regular administration (Skidmore-Roth,	1. Educate the client to take this medication with food (Skidmore-Roth, 2020). 2. Educate the client to wear an emergency identification identifying the client's	1. Educate the client "to promptly report headache, dizziness, symptoms of overgrowth of infection, renal impairme	1. For patients who inhale this medication educate the client "not to exceed 12 doses within 24

	they should "report any numbness or weakness in the lower extremities " while taking this medication (Skidmore-Roth, 2020).	2020). 2. Educate the client that they should avoid consuming any alcohol while taking this medication (Skidmore-Roth, 2020).	name, medications taken, disorder diagnosis, prescriber and their phone number (Skidmore-Roth, 2020).	nt" (Skidmore-Roth, 2020). 2. Educate the client "to report loss of hearing, ringing, or roaring in the ears; feeling of fullness in the head" (Skidmore-Roth, 2020).	hours; to notify health care professional if symptoms do not improve within 30 min after administration of medication or if condition worsens " (Skidmore-Roth, 2020). 2. Educate the client "that rinsing the mouth after use of the inhaler, good oral hygiene, and sugarless gum or candy may minimize dry mouth" (Skidmo

					re-Roth, 2020).

Medications Reference (1) (APA):

Dabaja, A., Dabaja, A., & Abbas, M. (2023, May 8). *Polyethylene glycol*. National Library of Medicine. https://www.ncbi.nlm.nih.gov/books/NBK557652/

Jones & Bartlett Learning. (2022). *2023 Nurse's drug handbook* (22nd ed.).

Lewis, C. B., & Adams, N. (2022, January 17). *Phenobarbital*. National Library of Medicine. https://www.ncbi.nlm.nih.gov/books/NBK532277/#:~:text=Go%20to%3A-,Mechanism%20of%20Action,on%20GABA%2DA%20receptor%20subunits.

Multum, C. (2024, March 8). *Phenobarbital*. Drugs.com. https://www.drugs.com/mtm/phenobarbital.html#before-taking

Sinha, S. (2024, March 22). *MiraLAX*. Drugs.com. https://www.drugs.com/miralax.html#:~:text=Pour%20the%20powder%20into%204,days%20of%20using%20the%20medication.

Skidmore-Roth, L. (2020). *Mosby's 2021 nursing drug reference* (34th ed.). Elsevier.

Assessment

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

GENERAL: Alert and oriented × 0 **Alertness:** Awake **Orientation:** Not oriented **Distress:** In no acute distress **Overall appearance:** The patient is appropriately dressed for the hospital setting.	
INTEGUMENTARY: **Skin color:** Light brown **Character:** Dry and intact **Temperature:** Warm	

Turgor: Skin returned back to normal immediately, no skin tenting present. **Rashes:** None **Bruises:** None **Wounds:** Pressure injury present on the client's nose, located specifically on the bridge of the nose. **Braden Score:** 9 **Drains present: Y☒ N ☐** **Type:** Foley catheter	
HEENT: **Head/Neck:** Head and neck are symmetrical. Unable to assess trachea, thyroid, and for lymphadenopathy due to mother's refusal of this part of the physical assessment. **Ears:** Ears appear symmetrical bilaterally. Visually no lesions or lumps could be seen bilaterally. Unable to physically assess and palpate the external parts of the ear and the internal ear canals due to mother's refusal of this part of the physical assessment. **Eyes:** Sclera is white bilaterally, cornea is clear bilaterally, conjunctiva is pink bilaterally, and no drainage noted. Eyes have a slight bulging appearance. Bilaterally eyelids are moist and light brown without any lesions or discharge present. Unable to assess PERRLA due to mother's refusal of this part of the physical assessment. Unable to assess for EOMs due to the client's inability to follow commands. **Nose:** Septum appears midline, turbinates appear to be moist and pink with no bleeding, exudate, or polyps present bilaterally. Pressure injury from use of CPAP machine located on the bridge of the client's nose. Unable to assess frontal sinuses due to mother's refusal of this part of the physical assessment. **Teeth:** All teeth appear to be present. Oral mucosa is pink and moist, there is a small amount of dried blood at mid tongue. Unable to assess the posterior pharynx, tonsils, uvula, hard palate, and soft palate due to mother's refusal of this part of the	.

physical assessment.	
CARDIOVASCULAR: **Heart sounds:** Heart sounds are clear with S1 and S2 sounds present. No signs of S3, S4, murmurs, gallops, or rubs heard upon auscultation. PMI is palpable approximately at the 5th intercostal space at the MCL. **Cardiac rhythm (if applicable):** Sinus Rhythm **Peripheral Pulses:** All four limbs of the patient were contracted. Unable to assess peripheral pulses due to mother's refusal of this part of the physical assessment. **Capillary refill:** Less than 3 seconds **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:** Lower legs bilaterally with 1+ edema present according to the patient's nurse.	.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds:** Normal rate and rhythm of respirations. Anterior lung sounds are clear throughout bilaterally except for slight crackles heard in the base of the left lung. Unable to assess posterior lungs due to the client's immobility. No signs of rhonchi or wheezes noted bilaterally. The client is receiving oxygen via nasal cannula at 2 L/min and has an oxygen saturation of 99%.	.
GASTROINTESTINAL: **Diet at home:** Dietary supplement via PEG tube **Current Diet:** Dietary supplement via PEG tube **Height:** 3' 10" **Weight:** 87 lbs. 14.4 oz. **Auscultation Bowel sounds:** **Last BM:** Morning of 4/8/24 **Palpation: Pain, Mass etc.:** Abdomen is nontender and soft upon palpation. No presence of organomegaly and masses noted upon palpation of all four	.

quadrants. **Inspection:** **Distention:** No distention noted **Incisions:** Incision for PEG tube located on the left side of the abdomen. **Scars:** None **Drains:** None (PEG Tube only used for feeding and medication administration). **Wounds:** None **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** N/A **Feeding tubes/PEG tube Y ☒ N ☐** **Type:** PEG Tube	
GENITOURINARY: **Color:** Yellow **Character:** Clear **Quantity of urine:** 325 mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** Foley **Size:** 16 French	
MUSCULOSKELETAL: **Neurovascular status:** Nail bed is pink and lunula is white, contractures are present in all four extremities, and skin is warm. **ROM:** Very limited due to physical immobility and limb contractures × 4. **Supportive devices:** A lift to help move patient. **Strength:** Unable to assess **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 50 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ The patient is dependent on others. **Needs assistance with equipment** ☒ The patient herself does not use equipment but she requires lift equipment to move her. **Needs support to stand and walk** ☐ The patient is unable to stand or walk due to being bedridden.	.

NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☐ N☐** **UNABLE TO ASSESS** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **UNABLE TO ASSESS** **Orientation:** Alert and oriented × 0 **Mental Status:** Unable to fully assess (the patient has impaired cognition, extent cannot be assessed). **Speech:** Nonverbal **LOC:** Alert and awake	.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** Unable to assess due to the patient being nonverbal. **Developmental level:** According to Piaget's cognitive stages of development the patient is in the formal operational stage of her (Mcleod, 2024a). According to Erikson's stages of development the patient is in stage 7 of her life which is generativity vs. stagnation (Mcleod, 2024b). **Religion & what it means to pt.:** According to the patient's mother the patient identifies with the Pentecostal religion. The patient is unable to participate with regular church services due to immobility. **Personal/Family Data (Think about home environment, family structure, and available family support):** The patient's mother and father are active in the patient's life. The parents frequently visit the patient at the Swann's Special Care Center where the patient resides.	.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
3:35 a.m.	94 bpm	121/84 mm Hg	20 bpm	97.8℉ (36.6℃¿	99% via nasal cannula
8:12 a.m.	95 bpm	100/59 mm Hg	20 bpm	96.9℉	99% via nasal

				(36.1℃¿	cannula

Vital Sign Trends:

Throughout the night, the client's vitals remained within normal reference ranges. In the morning hours, most of the client's vitals remained within the normal reference ranges, with the exception of her blood pressure, which was hypotensive at 100/59 mm Hg.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
3:35 a.m.	FLACC	N/A	None	None	None
8:12 a.m.	FLACC	N/A	None	None	None

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18 G on both left and right arm **Location of IV:** Anterior left upper arm and anterior right upper arm **Date on IV:** 4/04/2024 **Patency of IV:** No medications administered via IV during clinical. **Signs of erythema, drainage, etc.:** No sign of drainage or erythema. **IV dressing assessment:** Dressing is clean, dry, and intact.	The patient had an IV saline lock and the patient had no IV medications or fluids listed in the MAR.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
During Clinical Dietary supplement: 450 mL Administration of pseudafed via G-Tube: 30 mL Flush with water before and after administering	During Clinical Incontinence of stool x1 bowel movement

psudafed via G-Tube: 60 mL Total Intake: 540 mL	Total urine: 325 mL

Nursing Care

Summary of Care (2 points)

Overview of care:

During clinical, I administered the client Sudafed via G-Tue and a Lovenox shot in the abdomen. Blood was obtained by a phlebotomist and sent to the lab to determine current arterial blood gas levels. I was able to do a limited head-to-toe assessment since the mother refused parts of the physical assessment. Obtaining vitals was attempted; however, the mother refused them at that time. Vitals were obtained from the notes in Epic. The client did not leave the floor for any procedures or testing. The mother requested that her daughter just be able to rest, so there was limited interaction with the client due to that request.

Procedures/testing done: The client had her blood taken during clinical to determine her current arterial blood gas levels. No other procedures or testing was performed during clinical.

Complaints/Issues: Complaints were obtained from the client's mother due to the client's nonverbal status. The mother complained about the client being turned too frequently.

Vital signs (stable/unstable): Vitals could not be obtained during clinical due to the mother's refusal at the time of the attempt. The client's automatic vitals remained stable during the clinical.

Tolerating diet, activity, etc.: The client was tolerating the dietary supplement she was receiving through her PEG tube very well. The client was not active during clinical; she remained bedridden.

Physician notifications: No consults during clinical.

Future plans for client: In the future, after she is discharged, the client will return to the Swann Special Care Center where she will be cared for.

Discharge Planning (2 points)

Discharge location: The client will be discharged to Swann Special Care Center.

Home health needs (if applicable): The client is not returning home with her parents. The client will be going to Swann Special Care Center, where she will need to be able to use her CPAP machine with the updated settings that her provider prescribed.

Equipment needs (if applicable): This patient will require a lift to move her.

Follow-up plan: The client should continue her care once back at Swann Special Care Center and be transported to any follow-up appointments she may have with her providers through Carle.

Education needs: The mother of the client may need to be educated on the importance of turning/repositioning the client every 2 hours. The parents and the care providers at Swann Special Care Center would benefit from being educated on how to adjust the CPAP settings to the newly prescribed settings for the client so she will be able to receive her CPAP during the night.

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

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

with “related to” and “as evidenced by” components • Listed in order by priority – highest priority to lowest priority pertinent to this client	nursing diagnosis was chosen			respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to acute respiratory failure diagnosis as evidenced by elevated carbon dioxide (CO2) and bicarbonate (HCO3) levels.	The patient has been diagnosed with asthma and uses a CPAP machine which could alter the patient’s ABG levels. Two days before this admission the patient was admitted for pneumonia. This patient frequently deals with impaired gas situations.	**1.** “Place patient in position that best facilitates chest expansion to enhance gas exchange” (Phelps, 2022). **2.** “Monitor ABG levels and notify physician immediately if PaO_2 or arterial oxygen saturation drops or $PaCO_2$ rises. Administer endotracheal intubation and mechanical ventilation if needed” (Phelps, 2022).	**1.** The “patient’s pH, PaO_2, and $PaCO_2$ return to and remain within established limits” (Phelps, 2022).	Due to the client’s nonverbal status and lack of understanding the client’s family was receptive and responded well to the interventions chosen. The family demonstrated their knowledge by explaining the importance of positioning the patient and taking blood samples to determine the client’s ABG levels.
2. Risk for infection related to presence of foley catheter.	The presence of a foley catheter increases a patient’s risk of getting an infection by giving the bacteria an entry point for infection.	**1.** “Minimize patient’s risk of infection by washing hands before and after providing care” (Phelps, 2022). **2.** “Change IV tubing, and give site care every 24 to 48 hours	**1.** The “patient’s urine remains clear, yellow, odorless, and free from sediment” (Phelps, 2022).	Due to the client’s nonverbal status and lack of understanding the client’s family was receptive and responded well to the interventions chosen. The family demonstrated their knowledge

		or as facility policy dictates to help keep pathogens from entering body" (Phelps, 2022).		by explaining the importance of hand washing and providing IV/catheter site care as the facility policy requires.
3. Impaired skin integrity related to use of CPAP machine as evidenced by pressure injury on nose.	The client has a pressure injury located on the bridge of her nose from using a CPAP machine so frequently, this can lead to infection if the pressure injury worsens.	**1.** "Inspect patient's skin every 8 hours, describe and document skin condition, and report changes to provide evidence of the effectiveness of skin care regimen" (Phelps, 2022). **2.** "Instruct patient and family in the skin care regimen to ensure compliance" (Phelps, 2022).	**1.** The patient's existing wounds and lesions will heal (Phelps, 2022).	Due to the client's nonverbal status and lack of understanding the client's family was receptive and responded well to the interventions chosen. The family demonstrated their knowledge by explaining the importance of adhering to the client's skin care regimen and also demonstrated how to correctly care for the client's skin.
4. Knowledge deficit related to hydrocephalus diagnosis as evidenced by nonverbal status.	Due to the client's multiple diagnoses, one including hydrocephalus the patient's physical and mental	**1.** "Identify patient's level of cognitive, physical, linguistic, and perceptual development	**1.** Realistic learning goals are developed for the client and the family utilizes the	Due to the client's nonverbal status and lack of understanding the client's family was receptive and responded well to the interventions

	disabilities prevent her from understanding, communicating (due to nonverbal status), and learning about her medical situation.	to establish appropriate learning goals" (Phelps, 2022). **2.** "Refer family members to outside agencies, such as a home health care organization, for assistance after patient's discharge. This ensures continuity of care and assistance with follow-up after discharge" (Phelps, 2022).	outside resources (Phelps, 2022).	chosen. The family demonstrated their knowledge by explaining the importance of developing realistic learning goals based on the client's cognitive, physical, linguistic, and perceptual status and by utilizing outside agencies and sources that can help maintain the client's care after discharge.

Other References (APA):

Mcleod, S. (2024a, January 24). *Piaget's theory and stages of cognitive development*. Simply Psychology. https://www.simplypsychology.org/piaget.html

Mcleod, S. (2024b, January 25). *Erik Erikson's stages of psychosocial development*. Simply Psychology. https://www.simplypsychology.org/erik-erikson.html

Phelps, L. (2022). *Nursing diagnosis reference manual* (12th ed.). Wolters Kluwer.

Concept Map (20 Points):

Subjective Data

The client's signs and symptoms include:

- Hypoxia
- Cyanosis
- Episodes of apnea
- Low Oxygen Saturation

The patient is nonverbal; according to the patient's parents, she was not in any pain upon her arrival to the emergency department.

Nursing Diagnosis/Outcomes

1. Impaired gas exchange related to acute respiratory failure diagnosis as evidenced by elevated carbon dioxide (CO2) and bicarbonate (HCO3) levels.
   a. The "patient's pH, PaO_2, and $PaCO_2$ return to and remain within established limits" (Phelps, 2022).
2. Risk for infection related to presence of foley catheter.
   a. The "patient's urine remains clear, yellow, odorless, and free from sediment" (Phelps, 2022).
3. Impaired skin integrity related to use of CPAP machine as evidenced by pressure injury on nose.
   a. The patient's existing wounds and lesions will heal (Phelps, 2022).
4. Knowledge deficit related to hydrocephalus diagnosis as evidenced by nonverbal status.
   a. Realistic learning goals are developed for the client and the family utilizes the outside resources (Phelps, 2022).

Objective Data

Upon arrival to the ED, the patient had a chest X-ray performed, and no focal infiltrates were found, but some vascular fullness was located in the left lung, which could indicate some type of respiratory infection. The patient had a PEG tube in place to receive her dietary supplement and her medications. The patient also has a Foley catheter in place. 1+ edema located in lower legs bilaterally. The patient's vitals have been within the reference range other than her B/P at 8 a.m., which was 100/59 mm Hg.

Client Information

A 41-year-old female born with hydrocephalus and scoliosis with a history of asthma, cerebral palsy, and seizures was admitted for acute respiratory failure on 4/4/24. The client is nonverbal and is a resident of the Swann Special Care Center. She was just discharged from Carle on 4/2/24 for pneumonia. The client's mother and father are active in her life. She is currently immobile with a pressure injury located on the bridge of her nose from chronic use of CPAP machine. Before coming to the ED the client was unable to use her CPAP machine at night when she sleeps which is what lead to her episode of apnea and hypoxia.

Nursing Interventions

Nursing Diagnosis 1 Interventions:
1. "Place patient in position that best facilitates chest expansion to enhance gas exchange" (Phelps, 2022).
2. "Monitor ABG levels and notify physician immediately if PaO_2 or arterial oxygen saturation drops or $PaCO_2$ rises. Administer endotracheal intubation and mechanical ventilation if needed" (Phelps, 2022).
Nursing Diagnosis 2 Interventions:
1. "Minimize patient's risk of infection by washing hands before and after providing care" (Phelps, 2022).
2. "Change IV tubing, and give site care every 24 to 48 hours or as facility policy dictates to help keep pathogens from entering body" (Phelps, 2022).
Nursing Diagnosis 3 Interventions:
1. "Inspect patient's skin every 8 hours, describe and document skin condition, and report changes to provide evidence of the effectiveness of skin care regimen" (Phelps, 2022).
2. "Instruct patient and family in the skin care regimen to ensure compliance" (Phelps, 2022).

Nursing Diagnosis 4 Interventions:
1. "Identify patient's level of cognitive, physical, linguistic, and perceptual development to establish appropriate learning goals" (Phelps, 2022).
2. "Refer family members to outside agencies, such as a home health care organization, for assistance after patient's discharge. This ensures continuity of care and assistance with follow-up after discharge" (Phelps, 2022).