N433 Care Plan #1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 05/31/2022	**Client Initials** K.W.	**Age (in years & months)** 4 months	**Gender** Female
Code Status Full code	**Weight (in kg)** 5.67kg	**BMI** 16.97 kg/m2	**Allergies/Sensitivities (include reactions)** NKA

Medical History (5 Points)

Past Medical History: Congenital CMV, hip dysplasia, calcifications of the brain, bilateral hearing loss

Illnesses: None before current reported

Hospitalizations: No history of hospitalizations

Past Surgical History: No past surgeries

Immunizations: Patient received the following vaccinations from birth-2 months of age: Hep B (2 doses), RV1 (1 dose), Dtap (1 dose), Hib (1 dose), PCV (1 dose), IPV (1 dose). The patient has not yet received her four-month vaccinations.

Birth History: The patient was delivered vaginally at 40 weeks and 4 days. No complications noted.

Complications (if any): N/A

Assistive Devices: Hip harness in the evening for hip dysplasia

Living Situation: The patient is taken care of by her mother, who is a pediatrician, and her father who is a sports medicine doctor. The patient has an older sister who also lives in the home.

Admission Assessment

Chief Complaint (2 points): Respiratory distress and decreased input

Other Co-Existing Conditions (if any): N/A

Pertinent Events during this admission/hospitalization (1 points):

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

A mother brought her 16-week-old into the Carle emergency department on 05/31/2022 with worsening symptoms of a cold. The patient has a history of congenital CMV, calcifications of the brain, bilateral hearing loss, and hip dysphagia. The mother stated, “She had a stuffy nose for two days, but on the third day, she was really struggling to breathe.”. On day three of the illness, the patient began displaying intercostal, subcostal, and supracostal reactions, poor eating, and a productive, frequent cough. The patient was fussy, lethargic, and appeared in distress. The mother claims that nose suctioning, a warm bath, and Tylenol provided no relief for the patient. The mother stated there were no aggravating or relieving factors and that the patient’s condition continued to worsen on the third day.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute bronchiolitis

Secondary Diagnosis (if applicable): N/A

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

The patient’s primary diagnosis was acute bronchiolitis caused by rhinovirus. Acute bronchiolitis is the acute onset of inflammation in the bronchioles typically caused by viruses such as RSV or rhinovirus. It is a common lower respiratory tract infection that causes inflammation to the lining of the epithelial cells in the small airways, resulting in mucous production, cellular necrosis, and wheezing (Erickson et al., 2022). It is the most common lower respiratory infection in children less than two years of age (Erickson et al, 2022). The patient is

16 weeks old with an underdeveloped immune system, has an older sibling, and goes to daycare weekly which puts her at high risk of contracting the illness.

Initial symptoms of this illness include nasal congestion, poor appetite, cough, sneezing, pharyngitis, and rhinitis (Holman et al., 2019). As the illness worsens, tachypnea, retractions, and wheezing can develop (Erickson et al., 2022). In the beginning of her sickness, the patient presented with a runny nose. On the third day, the patient began presenting with a productive cough, retractions, decreased input due to poor appetite, and labored breathing. With severe bronchiolitis, patients are at risk of respiratory failure, so crucial vital signs include respirations, oxygen saturation, and heart rate. The patient's vitals signs showed she was tachycardic, tachypneic, had elevated blood pressure and decreased oxygenation. These vital signs trends are commonly seen with severe lower and upper respiratory tract infections (Capriotti, 2020). As far as lab findings, elevated white blood cell count, liver enzymes, and CRP levels (Capriotti, 2020).

Clinical diagnosis of this infection includes a physical examination, directed history, and nasopharyngeal swabs to detect the specific respiratory virus that is causing the bronchiolitis (Friedman et al., 2018). Diagnostic tests and labs such as a chest x-ray, or CBC, cannot directly diagnose bronchiolitis (Friedman et al., 2018). My patient had a respiratory panel completed which showed a positive result of rhinovirus. The respiratory panel, as well as her signs and symptoms, aided in the diagnosis of bronchiolitis.

Prevention for bronchiolitis is like the prevention of many other respiratory illnesses. Hand hygiene is the best way to prevent the spread of the virus. Avoiding others who are sick, avoiding the sharing of cups, utensils, and toys, and wiping down surfaces with cleansing wipes can also aid in the prevention of this illness (Friedman et al., 2018).

Treatment options include hydration, suctioning, hypertonic saline nebulization, supplemental oxygen, intubation, or mechanical ventilation (Erickson et al., 2022). Bronchodilators are not recommended, and corticosteroids are controversial for treatment methods (Holman et al., 2019). The nurse should focus on maintain oxygen levels greater than 90%, decreasing the workload of breathing, maintaining the patient's hydration status, and providing comfort measures such as sweeties, non-nutritious sucking, swaddling, and snuggling. The patient is being treated with supplemental oxygen at 15L via nasal cannula, suctioning as needed, a continuous albuterol nebulizer, and hydration and nutrition through an NG tube.

Two potential complications that can result from bronchiolitis are acute respiratory distress syndrome and ear infections. The signs and symptoms of ARDS include tachypnea, coughing, muscle weakness, cyanosis, and shortness of breath (Capriotti, 2020). Nurses can assist in preventing this complication by performing frequent respiratory assessments, managing oxygen supplementation, and using proper positioning. With ear infections, common signs and symptoms include ear pain, loss of balance, drainage from the ears, fever, and difficulty sleeping (Capriotti, 2020). The nurse can aid in the prevention of ear infections by educating care givers on how to properly clean ears, avoiding cigarette smoke, and performing hand hygiene to reduce the spread of germs.

Pathophysiology References (2) (APA):

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

Erickson, E., Bhakta, R., & Mendez, M. (2022, March 22). *Pediatric Bronchiolitis*. National Center for Biotechnology Information. Retrieved June 3, 2022, from https://www.ncbi.nlm.nih.gov/books/NBK519506/

Friedman, J. N., Rieder, M. J., Walton, J. M. (2018). Bronchiolitis: Recommendations for diagnosis, monitoring, and management of children one to 24 months of age. *Pediatrics & child health*, *19*(9), 485–498. https://doi.org/10.1093/pch/19.9.485

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.

Active Orders (2 points)

Order(s)	**Comments/Results/Completion**
Activity:	Ad lib
Diet/Nutrition:	Breastmilk starting @ 10mL per hour via NG tube while in hospital
Frequent Assessments:	Hourly respiratory assessments until discontinued, Vital signs hourly until discontinued, Weigh diapers until discontinued, NG-tube care until discontinued
Labs/Diagnostic Tests:	Chest X-ray
Treatments:	Albuterol treatment through nebulizer
Other:	N/A
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
Nasogastric tube	An NG tube was placed due to the patient

	refusing to nurse or drink from a bottle.
Albuterol nebulizing treatment	The respiratory therapist wanted to try an albuterol nebulizing treatment to help open the airways before resorting to a more complex intervention like an ETT tube.
PICU status	The patient was switched to PICU status due to being on 15L of oxygen to maintain adequate oxygenation

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	3.9-5.3 10^6/uL	4.62	N/A	N/A
Hgb	10.5-15.5 10^6/ uL	13.2	N/A	N/A
Hct	34-40%	39.8	N/A	N/A
Platelets	150-400 10^3/uL	402	N/A	High platelet counts indicate that there are higher than normal platelet levels in the blood. The patient's current sickness with rhinovirus could trigger

				a high platelet count (Capriotti, 2020).
WBC	5.5-15.5 10^3/uL	10.02	N/A	N/A
Neutrophils	1.82-7.7 10^3/uL	2.30	N/A	N/A
Lymphocytes		67.3%	N/A	N/A
Monocytes		3.2	N/A	N/A
Eosinophils		4.1	N/A	N/A
Basophils		2.5	N/A	N/A
Bands		N/A	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-	135-143 mmol/L	136	N/A	N/A
K+	3.6-5.0 mmol/L	4.6	N/A	N/A
Cl-	98-107 mmol/L	104	N/A	N/A
Glucose	65-99 mg/dL	95	N/A	N/A
BUN	5-17 mg/dL	8	N/A	N/A
Creatinine	0.1-0.6 mg/dL	0.2	N/A	N/A
Albumin	3.4-4.2 g/dL	4.7	N/A	High albumin levels indicate there is a high concentration of the protein in the blood. The albumin level could be elevated due to the patient being dehydrated after refusing to eat for 12 hours (Capriotti, 2020).
Total Protein	5.9-7.0 g/dL	6.7	N/A	N/A
Calcium	8.7-9.8	10.5	N/A	High calcium levels occur when the

	mg/dL			amount of calcium entering the blood exceeds calcium excretion by the kidneys. Calcium levels can elevate due to dehydration and poor feeding from the patient. The patient has a history of calcifications of the brain which could also play a role in the elevated calcium serum levels (Capriotti, 2020).
Bilirubin	0.6-1.4 mg/dL	0.4	N/A	N/A
Alk Phos	145-320 U/L	258	N/A	N/A
AST	20-60 U/L	56	N/A	N/A
ALT	0-35 U/L	40	N/A	High levels of ALT in the blood indicate liver damage. The ALT levels could be elevated because of the current rhinovirus infection, or due to the patient's history of congenital CMV (Capriotti, 2020).
Amylase	98-405	N/A	N/A	N/A
Lipase	0-160	N/A	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	N/A	N/A	N/A	N/A
CRP	N/A	N/A	N/A	N/A
Hgb A1c	N/A	N/A	N/A	N/A
TSH	N/A	N/A	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	N/A	N/A	N/A	N/A
pH	N/A	N/A	N/A	N/A
Specific Gravity	N/A	N/A	N/A	N/A
Glucose	N/A	N/A	N/A	N/A
Protein	N/A	N/A	N/A	N/A
Ketones	N/A	N/A	N/A	N/A
WBC	N/A	N/A	N/A	N/A
RBC	N/A	N/A	N/A	N/A
Leukoesterase	N/A	N/A	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	Admission or Prior Value	Today's Value	Explanation of Findings
Urine Culture	NEG	N/A	N/A	N/A
Blood Culture	NEG	N/A	N/A	N/A
Sputum Culture	NEG	N/A	N/A	N/A
Stool Culture	NEG	N/A	N/A	N/A
Respiratory ID Panel	NEG	N/A	Positive	The patient tested positive for rhino/ enterovirus
COVID-19 Screen	NEG	N/A	NEG	N/A

Lab Correlations Reference (1) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and*

clinical perspectives. Philadelphia: F.A. Davis.

Carle Foundation Hospital (2021). *Reference range (lab values).* Urbana, IL.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

A chest x-ray was performed on the patient to confirm the placement of her nasogastric tube. Prior to the chest x-ray, the nurse tried to aspirate gastric contents to check the pH to confirm the location of the tube. However, the nurse was unable to aspirate any fluids. A chest x-ray was ordered to confirm that the tube was inside the stomach, and not in the lungs. Confirmation is needed before administering any fluids. The chest x-ray performed on June 1, 2022, confirmed that the tubing was in the correct location.

Diagnostic Test Correlation (5 points): Chest x-rays are not only used to confirm nasogastric tube placement but can also be used in children to visualize possible hyperinflation of the lungs, congenital heart defects, and infiltrates (Holman et al, 2022). Chest x-rays allow us to visualize the structures and organs of the chest such as the heart, lungs, and airways. Chest x-rays can show abnormalities such as inadequate lung expansion, tumors, pneumothorax, or the presence of fluid accumulation (Capriotti, 2020).

Diagnostic Test Reference (1) (APA):

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

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.

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

Brand/ Generic	Valganciclovir/ Valcyte	Prednisolone/ Prelone	AccuNeb/ albuterol sulfate	Tylenol/ Acetaminophen	
Dose	16mg/kg	1mg/kg= 5.67 mg	5mg/hr, 6mL/hr	83.2 mg	
Frequency	BID	BID	Continuous for 4 hrs	Q4H PRN	
Route	Nasogastric tube	Nasogastric tube	Continuous nebulizer	Nasogastric tube	
Classification	Antiviral, purine nucleoside	Glucocorticoid, Immunosuppressant	Adrenergic, bronchodilator	Antipyretic, nonopioid analgesic	
Mechanism of Action	Inhibits viral DNA synthesis by competing with deoxyguanosine and prevents the incorporation of deoxyguanosine into elongating viral DNA, resulting in termination of DNA synthesis	Binds to intracellular glucocorticoid receptors and suppresses inflammatory and immune responses by inhibiting neutrophil and monocyte accumulation at the inflammation site and suppressing their phagocytic and bactericidal activities	Albuterol attaches to beta2 receptors on bronchial cell membranes, which stimulates intracellular enzymes to convert ATP to (cAMP). This reaction decreases intracellular calcium levels.	Inhibits enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	
Reason Client Taking	Congenital CMV management	To reduce inflammation in the airways	To treat bronchospasms	To reduce pain and discomfort for the patient	
Concentration Available	90mg/1.5 mL	5mg/5mL	5mg/6mL	160mg/5mL	
Safe Dose Range Calculation	90.72mg-181.44 mg/day	0.79mg-11.34mg/day	5mg-20mg/day	83.2-499mg/day	
Maximum 24-hour Dose	181.44 mg/day	11.34mg/day	20mg/day	499mg/day	

Contraindications (2)	-Hypersensitivity to valganciclovir or its components -Acute kidney failure	-Hypersensitivity to Prednisolone or its components -Systemic fungal infection	-Hypersensitivity to albuterol or its components -Seizure disorders	-Hypersensitivity to acetaminophen or its components -Severe hepatic impairment	
Side Effects/Adverse Reactions (2)	-Diarrhea -Vomiting	-Vomiting -Edema	-Arrhythmias -Diarrhea	-Hypotension -Constipation	
Nursing Considerations (2)	-Monitor the patient for new seizures or increased seizure activity - Monitor for signs of hypersensitivity such as wheezing, cough, or rash	-Assess patient regularly for evidence of heart failure or hypertension -Monitor patient's intake, output, and daily weight	-Monitor serum potassium level due to this drug potentially causing transient hypokalemia -Monitor respiratory rate, oxygen saturation, and lung sounds before and after administration	-Confirm the patient is not taking other medications that contain acetaminophen -Monitor the patient for signs of liver toxicity such as severe nausea and vomiting	
Client Teaching needs (2)	- Instruct caregivers to report side effects, including severe or prolonged fever, infection, or diarrhea and vomiting -Warn caregivers not to exceed prescribed dose or frequency.	-Instruct the caregiver to give this medication exactly as prescribed to avoid adverse reactions -Caution the caregiver about potential side effects of this drug such as delayed wound healing	-Inform caregivers to report signs and symptoms of allergic reaction such as difficulty swallowing, itching, and rash. -Inform caregiver to monitor nasal cannula for correct positioning in the nares to ensure the patient is getting the medication	-Caution caregiver not to exceed recommended dosage or give other drugs containing acetaminophen at the same time because of risk of liver damage -Educate caregiver on signs and symptoms of hepatotoxicity such as malaise or easy bruising	

Medication Reference (1) (APA):

Jones, D.W. (2021). *Nurse's drug handbook*. (A. Bartlett, Ed.) (20th ed.). Jones & Bartlett

Learning.

Assessment

Physical Exam (18 points) Highlight Abnormal Pertinent Assessment Findings

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alertness:** Awake, alert but lethargic **Orientation:** Oriented to parents **Distress:** Mild respiratory distress **Overall appearance:** The patient appears well groomed and taken care of.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 10 **Drains present: Y☐ N ☒** **Type:** N/A **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:**	**Skin color:** Patient's skin was pale **Character:** The patient's skin was intact, smooth, and soft **Temperature:** Warm to the touch **Turgor:** Elastic, normal for age **Rashes:** Mild rash on the abdomen **Bruises:** None observed **Wounds:** None observed **Braden Score:** 10 **IV Assessment: N/A**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	**Head/Neck:** Head atraumatic, anterior fontanelle open, soft, and flat, trachea appeared midline, oral mucosa was moist and intact, uvula was midline, no tonsil enlargement seen. The tongue was pink, moist, and without lesions. **Ears:** Symmetrical, tympanic membrane is grey bilaterally, no drainage present, bilateral deafness reported **Nose:** Symmetrical**,** no deviated septum, no drainage present **Eyes:** The patient's eyes exhibited PERRLA. Sclera appeared white with no inflammation or drainage bilaterally.

	Teeth: No teeth, gums were pink and moist **Thyroid:** No tracheal deviation observed
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:**	**Heart sounds:** Regular S1 and S2 sounds **S1, S2, S3, S4, murmur etc.** S1 and S2 noted, no murmurs were heard **Cardiac rhythm:** Tachycardic **Peripheral Pulses:** Radial and pedal pulses are 2+ bilaterally **Capillary refill:** Normal, fingertips blanched white in less than 2 seconds
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	Diminished breath sounds and mild expiratory wheezes heard upon auscultation, tracheal tugging was observed, labored breathing with the use of accessory muscles of the abdomen, intercostal, subcostal, and supracostal retractions observed
GASTROINTESTINAL: **Diet at home:** **Current diet:** **Height (in cm):** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☒ N ☐** **Size:** 6 Fr **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Diet at home:** Breastmilk **Current diet:** NPO, Breastmilk via NG tube **Height (in cm):** 57.8 cm **Auscultation Bowel sounds:** Hyperactive in all four quadrants **Last BM:** June 1st, 2022 in AM **Palpation: Pain, Mass etc.:** Abdomen is soft, non-tender to palpation, no masses detected **Inspection:** **Distention:** No distention present **Incisions:** No incisions present **Scars:** No scars present **Drains:** None **Wounds:** No wounds present
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Color:** Yellow **Character:** Clear **Quantity of urine:** 110mL **Inspection of genitals:** Intact, no lesions, no redness or inflammation
MUSCULOSKELETAL:	**Neurovascular status:** Oriented to caregivers,

Neurovascular status: **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** 2 **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	the patient was alert, awake, and lethargic. Radial and pedal pulse are 2+ bilaterally. Capillary refill was less than 2 seconds. **ROM:** Upper and lower extremities bilaterally are equal in strength **Supportive devices:** N/A **Strength:** Upper and lower extremities bilaterally are equal in strength **Fall Score:** 2, low risk
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	.**MAEW:** Upper and lower extremities bilaterally are equal in strength **PERRLA:** Yes, pupils constrict normally **Strength Equal:** Upper and lower extremities bilaterally are equal in strength **Orientation:** Patient was alert, awake, and orientated to caregivers **Mental Status:** Alert and Orientated **Speech:** N/A **Sensory:** Intact **LOC:** Patient was alert and oriented to parents
PSYCHOSOCIAL/CULTURAL: **Coping method(s) of caregiver(s):** **Social needs (transportation, food, medication assistance, home equipment/care):** **Personal/Family Data (Think about home environment, family structure, and available family support):**	**Coping method(s) of caregiver(s):** The caregiver (mother) coped by calling other family members, snuggling the patient, crying as needed, and talking with the nurses through her struggles. **Social needs (transportation, food, medication assistance, home equipment/care):** The patient needs medication administration assistance, as well as feeding assistance. **Personal/Family Data:** The patient lives at home with her mother, father, and older sister. The patient goes to daycare during the day, otherwise is taken care of by her parents. The patient has a stable support system of family.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0825	154bpm	101/61mmhg	64/min	36.9 C Aux	94% optiflow 15L
0857	167 bpm	N/A	62/min	37.1 C Aux	100%

					optiflow 15L

Vital Sign Trends:

During the student's first vital sign assessment, the patient's blood pressure and respirations were not within normal ranges. At 0825, the heart rate was 154bpm, blood pressure was 101/61mmHg, respirations at 64/min, temperature at 36.9 degrees Celsius, and oxygen was at 94% on 15 L of supplemental oxygen. At 0857, the heart rate was 167 bpm, respirations at 62/ min, temperature at 37.1 degrees Celsius, and oxygen was at 100% on 15 L of supplemental oxygen. The blood pressure was not taken for the second round of vitals as instructed by the nurse. The patient's respiratory rate and heart rate managed to stay elevated throughout the clinical shift due to the patient being in mild respiratory distress and displaying tachycardia. The oxygen saturation remained consistent due to the 15L supplementation. The patient did not display any fever during the clinical shift, and temperatures remained consistent.

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

Pulse Rate	90-160bpm
Blood Pressure	85/50mmHg
Respiratory Rate	25-30/min
Temperature	37.5° C
Oxygen Saturation	>92%

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
1030	rFLACC 3	N/A	N/A	Squirming, splinting, tense, crying	Shushing, patting, cuddling
1115 **Evaluation of pain status *after* intervention**	rFLACC 0	N/A	N/A	Sleeping, comfortable, no crying	Non nutritious sucking, cuddles, swaddling
Precipitating factors: Illness, anxiety, new environment, respiratory distress **Physiological/behavioral signs:** The patient appeared uncomfortable by displaying signs of pain such as crying, squirming, and bodily tension.					

Intake and Output (1 points)

Intake (in mL)	Output (in mL)
10mL of breastmilk via NG tube D5 0.45% NaCl w/ KCl 20 mEq, 25ml/hr x 6hrs= 150mL during shift	110 mL of urine (Weighed diapers)

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. Posterior fontanel closes by 2 to 3 months of age (Holman et al., 2019).
2. The infant's weight will double by the age of six months (Holman et al., 2019).

3. The infant will erupt 6-8 teeth by the end of the first year of life (Holman et al, 2019).

Age Appropriate Diversional Activities

1. Diversional activities should include activities that stimulate the sense and encourage development (Holman et al., 2019).
2. Diversional activities should include the infant playing with teething toys, rattles, and soft stuffed toys (Holman et al., 2019).
3. Diversional activities for this age group should provide interpersonal contact and promote education (Holman et al., 2019).

Psychosocial Development:

Which of Erikson's stages does this child fit?

The patient is in Erikson's stage of Trust vs. Mistrust (Holman et al., 2019).

What behaviors would you expect?

With this stage, the student would expect to see the infant have a sense of trust in their caregivers. The student would expect the caregivers to respond to the infant's basic needs such as feeding, cleaning, holding, changing diapers, and interacting with the infant (Holman et al., 2019).

What did you observe?

The student observed a close bond between the patient and her mother. The mother was able to calm the patient down quickly compared to other nurses present. The mother was quick to change a soiled diaper, comfort the child when they started to cry, and was actively pumping breastmilk for the child to receive through the NG tube.

Cognitive Development:

Which stage does this child fit, using Piaget as a reference?

The patient would be in the Sensorimotor stage (Holman et al., 2019).

What behaviors would you expect?

The student would expect to see the patient using sensory and motor skills such as improved head control, grasping objects in both hands, and rolling from belly to back (Holman et al., 2019).

What did you observe?

The student observed the patient displaying good head control, turning of her head to look around, and her hands loosely opened.

Vocalization/Vocabulary:

Development expected for child's age and any concerns?

The student would expect this patient to lift head and look around, grasp objects with both hands, bat at objects, and roll from belly to back (Holman et al., 2019). There are no concerns for the patient's development.

Any concerns regarding growth and development?

There are no concerns regarding growth and development for this patient.

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.

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" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client.	**Rational** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcomes**	**Evaluation** • How did the Client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective airway clearance related to secretions as evidence by increased mucus production and a hacky cough (Doenges et al., 2019)	This nursing diagnosis was chosen and prioritized first due to the patient displaying agitation when struggling to expectorate the secretions.	1. Assess airway and auscultate breath sounds. Note adventitious breath sounds such as wheezes or crackles. 2. Maintain the patient's airway by suctioning	1. The patient will maintain a patent airway with breath sounds clear or clearing. 2. The patient will remain free of cyanosis	-The patient's family responded well to the nurse's actions. The patient's family encouraged the use of suctioning to prevent the infant from gagging. The infant responded well to suctioning and the infant appeared less

		the airway as needed and removing excess secretions.	and dyspnea.	distressed afterwards. Goal met: The patient displayed no signs of cyanosis and an increased ease of breathing after suctioning.
2. Impaired gas exchange related to perfusion imbalance as evidenced by tachycardia (Doenges et al., 2019)	This nursing diagnosis was chosen due to the patient consistently displaying tachycardia throughout the shift.	1. Assess respiratory rate and depth. Note the use of accessory muscles, and retractions. 2. Administer oxygen supplementation as ordered via nasal cannula and titrate as needed.	1. The patient will demonstrate improved ventilation and adequate oxygenation of tissues by vital signs within the normal range. 2. The patient's heart rate will decrease within normal range.	-The patient's caregivers responded well to the nurse's actions because their anxiety reduced when they knew their child was being closely monitored. Goal Met: The patient's oxygen saturation was within normal limits with a high flow nasal cannula and the patient showed relaxed breathing.
3. Ineffective breathing pattern related to inflammatory process as evidenced by labored breathing (Doenges et al., 2019)	This nursing diagnosis was chosen due to the patient displaying subcostal, supracostal, and intercostal retractions.	1. Assess vital signs every hour and report abnormal changes to the provider. 2. Assist with respiratory treatments such as albuterol nebulizers, suctioning, and chest physiotherapy.	1. The patient will maintain effective breathing pattern as evidence by relaxed breathing 2. The patient	-The caregivers responded well to this intervention because the albuterol would help ease the work of breathing for their child. Goal met: The patient's respiration rate decreased and breathing

			will remain free of cyanosis and other signs of hypoxia.	became less labored.
4. Excessive fatigue related to respiratory efforts as evidenced by lethargy (Doenges et al., 2019)	This diagnosis was chosen due to the patient appearing tired in her crib from the increased work of breathing	1.Schedule and allow for rest periods in a quiet, comfortable environment 2. Assess for worsening weakness and fatigue, and monitor rest, sleep, and movement.	1. The patient will show an increase in energy and show interest in playing. 2.The patient will show an increased interest in breastfeeding.	The caregivers responded well to this intervention because they wanted to see their infant begin to act more like themselves. Goal met: The infant showed increased signs of energy by smiling and interacting with her mother.

Other References (APA):

Doenges, M. E., Murr, A. C., & Moorhouse, M. F. (2019). *Nursing care plans: Guidelines for individualizing client care across the life span*. F.A. Davis Company.

Concept Map (20 Points):

Subjective Data

The mother stated, “She had a stuffy nose for two days, but on the third day, she was really struggling to breathe.”

Nursing Diagnosis/Outcomes

Ineffective airway clearance related to secretions as evidence by increased mucus production and a hacky cough
Goal met: The patient displayed no signs of cyanosis and an increased ease of breathing after suctioning.
Impaired gas exchange related to perfusion imbalance as evidenced by tachycardia
Goal Met: The patient’s oxygen saturation was within normal limits with a high flow nasal cannula and the patient showed relax breathing.
Ineffective breathing pattern related to inflammatory process as evidenced by labored breathing
Goal met: The patient’s respiration rate decreased and breathing became less labored.
Excessive fatigue related to respiratory efforts as evidenced by lethargy
Goal met: The infant showed increased signs of energy by smiling and interacting with her mother.

Objective Data

Vital Signs:
0825: 154bpm, 101/61mmhg64/min, 36.9 C Aux, 94% optiflow 15L
0857:167 bpm, 62/min, 37.1 C Aux,100% optiflow 15L
Lab Results:
Platelets: 402, Albumin: 4.7, Calcium: 10.5, ALT: 4.7
Diagnostic tests:
Chest x-ray confirmed that the location of the NG tube was in the stomach.
Respiratory panel: Positive for rhinovirus

Client Information

A mother brought her 16-week-old Caucasian female into the Carle emergency department on 05/31/2022 with worsening symptoms of a cold. The patient has a history of congenital CMV, calcifications of the brain, bilateral hearing loss, and hip dysphagia. The patient has no prior illnesses, surgeries, or hospitalizations.

Nursing Interventions

Assess airway and auscultate breath sounds. Note adventitious breath sounds such as wheezes or crackles.
Maintain the patient’s airway by suctioning the airway as needed and removing excess secretions.
Assess respiratory rate and depth. Note the use of accessory muscles, and retractions.
Administer oxygen supplementation as ordered via nasal cannula and titrate as needed.
Assess vital signs every hour and report abnormal changes to the provider.
Assist with respiratory treatments such as albuterol nebulizers, suctioning, and chest physiotherapy.
Schedule and allow for rest periods in a quiet, comfortable environment
Assess for worsening weakness and fatigue, and monitor rest, sleep, and movement.