N433 Care Plan # 1

Lakeview College of Nursing

Cecilia Duong

Demographics (3 points)

Date of Admission 06/09/2022	**Client Initials** T.M.	**Age (in years & months)** 3 months (92 days)	**Gender** Male
Code Status Full Code	**Weight (in kg)** 5.32 kg	**BMI** 15.76 kg/m^2	**Allergies/Sensitivities (include reactions)** None Reported

Medical History (5 Points)

Past Medical History: Pneumonia (03/16/2022)

Illnesses: None Reported

Hospitalizations: Previously hospitalized at Sarah Bush Lincoln Health Center for in-patient care.

Past Surgical History: None Reported

Immunizations: Up to date per caregiver.

Birth History: 37 weeks' gestation

Complications (if any): None Reported

Assistive Devices: None Reported

Living Situation: The patient lives at home with his caregivers. His caregivers are his biological mother and father. Both are involved in the patient's care.

Admission Assessment

Chief Complaint (2 points): Respiratory Distress in Pediatric Patient

Other Co-Existing Conditions (if any): None Reported

Pertinent Events during this admission/hospitalization (1 points): Known history of former admission to inpatient care for pneumonia and history of a cough and difficulty breathing per

caregiver. The patient was on a High Flow, High Humidity Nasal Cannula, and FiO2 was at 21%. The patient's oxygen saturation was stable, but he excessively used accessory muscles when breathing, which caused mild wheezing in the lungs. The patient improved and was changed to utilize Room Air overnight with stable vital signs to be discharged.

History of present Illness (OLD CARTS) (10 points): The caregiver of the three-month-old Caucasian male infant presented to the hospital on June 9th, 2022, with respiratory distress. The patient's caregiver states, "My son has shortness of breath and has been showing signs of using his accessory muscles to breathe for the last twenty-four hours." The caregiver mentions that the patient's symptoms have been ongoing for about two days, and the patient is experiencing wheezing upon inspiration and dyspnea. The caregiver notes that the patient is experiencing labored breathing and is more fussy than usual. The caregiver states the patient is showing pain due to his grimaced facial expression and troubled breathing. The caregiver says feeding and movement aggravate the baby's pain and elevating his head while rocking him relieves the pain.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Principle Problem Respiratory Distress in Pediatric Patient

Secondary Diagnosis (if applicable): Acute Bronchitis due to Rhinovirus

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

The patient's primary diagnosis was a Principle Problem of Respiratory Distress in a Pediatric Patient, with a secondary diagnosis of Acute Bronchitis due to Rhinovirus (Capriotti & Frizzell, 2020). *Respiratory distress* is a condition that presents with progressive arterial

hypoxemia, dyspnea, and a marked increase in the work of breathing (Capriotti & Frizzell, 2020). Most patients require endotracheal intubation and positive pressure ventilation (Capriotti & Frizzell, 2020). Prematurity, maternal diabetes, cesarean delivery, and asphyxia are risk factors for respiratory distress in infants; infants born between 22 and 30 weeks are at risk for this condition (Capriotti & Frizzell, 2020). There have been several clinical disorders that have been associated with the development of respiratory distress. However, most patients that develop this condition are in the presence of an established pulmonary or nonpulmonary infection (Capriotti & Frizzell, 2020). The most common cause of respiratory distress in primary pneumonia can be bacterial, viral, or fungal (Capriotti & Frizzell, 2020).

Respiratory distress in the first six days of onset has been diagnosed through evidence of interstitial and alveolar edema with an accumulation of neutrophils, macrophages, and red blood cells in the alveoli (Capriotti & Frizzell, 2020). There may also be infiltration of fibroblasts and some evidence of collagen deposition within the alveoli (Capriotti & Frizzell, 2020). In many patients, resolution progresses without fibrosis or the gradual resolution of the edema and acute inflammation (Capriotti & Frizzell, 2020). The alveoli may collapse and reduce the lungs' surface area for oxygen and gas exchange (Capriotti & Frizzell, 2020). Alveoli typically do not develop appropriately; instead, multiple tiny alveoli sacs in the lungs and fewer large alveoli are formed (Capriotti & Frizzell, 2020). The larger alveoli that are formed cannot supply sufficient oxygen for a child's development; therefore, excessive accumulation in the alveoli will affect the child's ability to breathe comfortably (Capriotti & Frizzell, 2020).

Symptoms of respiratory distress include respiratory difficulty at birth that gets progressively worse, cyanosis, flaring of the nostrils, tachypnea, chest retractions using accessory muscles, wheezing, extreme tiredness, and severe shortness of breath (Hinkle &

Cheever, 2022). It can also include labored, usually rapid breathing, and low blood pressure. The essential vital signs to monitor are pulse and respirations (Hinkle & Cheever, 2022). T.M.'s vital signs showed slight changes during the clinical shift. At 1500, the patient's pulse was 161 beats per minute, 42 respirations per minute, 37.2 degrees Celsius (temperature), and 96% oxygen saturation. During the second assessment, at 1615, the patient's pulse was 166 beats per minute, respirations were 42, the temperature was 37.2 degrees Celsius, and oxygen was 98%. The patient's blood pressure was assessed in the morning and will not be reassessed throughout the day without a healthcare provider's order per the department's policies.

Laboratory tests and diagnostic tests were unable to attain due to the patient's previous visit to Sarah Bush Lincoln Health Center and not being ordered at Carle Foundation Hospital. Typical laboratory tests to be ordered due to respiratory distress include a complete blood count (CBC), arterial blood gas evaluation (ABG), urinalysis (U.A.), chest X-Ray, and a respiratory pathogen panel to help in diagnosing the problem. A patient diagnosed with respiratory distress may need diagnostic tests to indicate the lungs' status and how well it facilitates gas exchange for optimal lung expansion. Chest X-Rays and Respiratory Pathogen Tests may show residual volumes in the lungs. T.M. was also under pulse oximetry monitoring throughout the hospital stay to monitor the oxygen saturation throughout his body.

Treatment options for respiratory distress include placing an endotracheal (E.T.) tube into the baby's windpipe, a mechanical breathing machine to do the work of breathing for the baby, supplemental oxygen, continuous positive airway pressure (CPAP), ventilator support, prone positioning, and fluid management (Hinkle & Cheever, 2022). Oxygen therapy via mechanical ventilation, CPAP, and E.T. tube has proven to assist infants with respiratory distress (Hinkle & Cheever, 2022). Medications that include diuretics, bronchodilators, and methylxanthines can

decrease pulmonary distress (Hinkle & Cheever, 2022). In addition, antibiotics are also used to treat infection, anti-inflammatory drugs reduce the inflammation in the lungs, and diuretics assist in eliminating fluid from the lungs (Hinkle & Cheever, 2022). T.M.'s medications include oral and nebulizer medications to aid his condition; ibuprofen, albuterol sulfate, and prednisone were used.

Complications of respiratory distress include blood clots, deep vein thrombosis (DVT), pneumothorax (collapsed lung), muscle weakness, lung fibrosis, anxiety, depression, and post-traumatic stress disorder (Ricci et al., 2021). With respiratory distress, patients are at a higher risk of developing other medical problems while in the hospital and blood clots because patients experience a decrease in activity level and resort to lying still in the hospital while on ventilators and oxygen machines (Ricci et al., 2021). Nursing actions include frequent position changes to help loosen secretion and allow optimal gas exchange for the patient and elevate the head of the bed to maximize gas exchange in the lungs (Ricci et al., 2021). Additional nursing actions include managing the patient's nutrition and suctioning the oral cavity to maintain a clear airway (Ricci et al., 2021). This patient's treatment plan includes monitoring the patient's vital signs every two hours and maintaining the patient's airway by suctioning the excess mucus in the upper respiratory tract. It is also encouraged for the patient to change positions and increase activity level in play as tolerated.

Pathophysiology References (2) (APA):

Capriotti, T. & Frizzell, J.P. (2020). Pathophysiology: Introductory concepts and clinical perspectives. (2nd ed.). F.A. Davis Company.

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical Nursing* (15th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

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:	Elevate the head of the bed as tolerated. The patient is encouraged to be active and alert when awake.
Diet/Nutrition:	Q3H, Regular diet
Frequent Assessments:	• Weight Once a Week • Pediatric Feeding Order: Every three hours • Vital Signs two hours (BP once a shift) • Heart and lung assessments every four hours • Intake and output: Every four hours • Weigh diapers: Until discontinued • Notify Physician: Until discontinued • Suction and reposition every two hours
Labs/Diagnostic Tests:	None Reported
Treatments:	• IVF D5 ½ NS + 20 mEqKCl 20 mL/hr • HHNC 6L, 35% wean as tolerated • Albuterol 1.25 mg/3mL Q6 PRN for cough and wheezing • Continue any home medications • Respiratory Therapist: Until Discontinued
Other:	
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
None Reported	Per nurse, no new orders for this clinical 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	3.43-4.80	N/A	N/A	N/A
Hgb	9.6-12.4	N/A	N/A	N/A
Hct	28.6-37.2	N/A	N/A	N/A
Platelets	244-529	N/A	N/A	N/A
WBC	6.51-13.32	N/A	N/A	N/A
Neutrophils	0.97 - 5.45	N/A	N/A	N/A
Lymphocytes	2.45 - 8.89	N/A	N/A	N/A
Monocytes	0.28 - 8.89	N/A	N/A	N/A
Eosinophils	0.03 - 0.61	N/A	N/A	N/A
Basophils	0.01 - 0.06	N/A	N/A	N/A
Bands	0-5%	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-	136 -145	N/A	N/A	N/A
K+	3.5 - 5.1	N/A	N/A	N/A
Cl-	98 - 107	N/A	N/A	N/A
Glucose	60 - 99	N/A	N/A	N/A
BUN	7 - 18	N/A	N/A	N/A
Creatinine	0.70 - 1.30	N/A	N/A	N/A
Albumin	3.4 - 5.0	N/A	N/A	N/A
Total Protein	6.4 - 8.2	N/A	N/A	N/A
Calcium	9.0 - 11.0	N/A	N/A	N/A
Bilirubin	0.2 - 1.0	N/A	N/A	N/A
Alk Phos	54 - 369	N/A	N/A	N/A
AST	15 - 37	N/A	N/A	N/A
ALT	12-78	N/A	N/A	N/A
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	Today's Value	Reason for Abnormal

		Value		
ESR	0-10	N/A	N/A	N/A
CRP	0.2-9.8	N/A	N/A	N/A
Hgb A1c	<7.5	N/A	N/A	N/A
TSH	5-10	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	Colorless - Yellow	N/A	N/A	N/A
pH	5.0 - 7.0	N/A	N/A	N/A
Specific Gravity	1.003 - 1.035	N/A	N/A	N/A
Glucose	Positive/ Negative	N/A	N/A	N/A
Protein	Positive/ Negative	N/A	N/A	N/A
Ketones	Positive/ Negative	N/A	N/A	N/A
WBC	0 - 25	N/A	N/A	N/A
RBC	0 - 20	N/A	N/A	N/A
Leukoesterase	Negative	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	Positive/Negative	N/A	N/A	N/A

Blood Culture	Positive/Negative	N/A	N/A	N/A
Sputum Culture	Positive/Negative	N/A	N/A	N/A
Stool Culture	Positive/Negative	N/A	N/A	N/A
Respiratory ID Panel	Positive/Negative	N/A	N/A	N/A
COVID-19 Screen	Positive/Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

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

Gregory, G., & Andropoulos, D. (2012). *Gregory's Pediatric Anesthesia* (5th ed.). Blackwell Publishing Ltd.

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2018). *Mosby's diagnostic and laboratory test reference* (14th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): An X-Ray Chest and Respiratory Panel were performed at Sarah Bush Lincoln Health Center. The results of the diagnostic tests could not be attained.

Diagnostic Test Correlation (5 points):

X-Ray Chest AP or PA only:

This diagnostic test indicated respiratory distress, acute bronchitis due to Rhinovirus, acute respiratory failure, and a history of pneumonia (Hinkle & Cheever, 2022). A chest x-ray evaluates respiratory, cardiac, and skeletal structures in the chest cavity (Hinkle & Cheever,

2022). Images from an X-Ray can determine if there is evidence of heart problems, atelectasis, emphysema, pneumonia, or various infections and other conditions related to chest pain and shortness of breath (Hinkle & Cheever, 2022). An X-ray is evident for this patient's case to rule out specific causes relating to the patient's labored breathing and use of accessory muscles.

Respiratory Pathogen Panel:

The indication for this diagnostic test is shortness of breath, history of pneumonia, and symptoms of a respiratory infection (Hinkle & Cheever, 2022). A respiratory pathogen panel can detect the presence of multiple disease-causing microbes in common pathogens (Hinkle & Cheever, 2022). Variations of the respiratory screening can test for influenza, respiratory syncytial virus (RSV), coronavirus, Rhinovirus, and adenovirus (Hinkle & Cheever, 2022). Upon admission, the patient was diagnosed with a secondary diagnosis of Acute Bronchitis due to Rhinovirus, indicating a respiratory panel screening to guide the course of treatment.

Diagnostic Test Reference (1) (APA):

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical Nursing* (15th ed.*)*. Wolters Kluwer Health Lippincott Williams & Wilkins

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

Brand/Generic	Tylenol/ acetaminophen	AccuNeb/ albuterol sulfate	Prednisone Intensol/prednisone	N/A	N/A
Dose	10mg/kg	1.25mg	1mg/kg	N/A	N/A
Frequency	Q4 PRN	Q6	Daily	N/A	N/A
Route	PO	Nebulization	PO	N/A	N/A

Classification	Pharmacologic class: Nonsalicylate, para-aminopheno derivative Therapeutic Class: Antipyretic, nonopioid analgesic	Pharmacologic class: Adrenergic Therapeutic class: Bronchodilator	Pharmacologic class: Glucocorticoid Therapeutic class: Immunosuppressant	N/A	N/A
Mechanism of Action	Inhibits enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	Albuterol attaches to beta2 receptors on bronchial cell membranes, which stimulates intracellular enzymes to convert ATP to (cAMP). This reaction decreases intracellular calcium levels.	Binds to intracellular glucocorticoid receptors and suppresses inflammatory and immune responses by inhibiting neutrophil and monocyte accumulation at inflammation site and suppressing their phagocytic and bactericidal activity.	N/A	N/A
Reason Client Taking	Relieve mild to moderate pain	Wheezing and coughing	To reduce inflammation and swelling	N/A	N/A
Concentration Available	160mg/5mL	2.5mg/3mL	5mg/5mL	N/A	N/A
Safe Dose Range Calculation	49.6-74.4 mg/dose	1.25-2.5 mg/dose	0.5-2 mg/dose	N/A	N/A
Maximum 24-hour Dose	74.4 mg/day	2.5 mg/day	2 mg/day	N/A	N/A
Contraindications (2)	- Hypersensitivity to acetaminophen or its components - Severe hepatic impairment - Severe active liver disease	-Hypersensitivity to albuterol or its components -Cardiovascular disease	- Hypersensitivity to prednisone or its components - Systemic fungal infection	N/A	N/A

Side Effects/Adverse Reactions (2)	- Atelectasis - Agitation - Hypotension	- Bronchospasms - Dyspnea - Arrhythmias	- Adrenal insufficiency - GI bleeding - pancreatitis	N/A	N/A
Nursing Considerations (2)	- Before and long-term therapy requires liver function test results including AST, ALT, bilirubin, and creatinine levels because drug may cause hepatotoxicity. - Monitor renal function in patients on long-term therapy. - Before administering acetaminophen, make sure the dosage is based on the patient's weight.	- Be aware that drug tolerance can develop with prolonged use. - Monitor serum potassium level because albuterol may cause transient hypokalemia. - Use cautiously in patients with cardiac disorders because albuterol can worsen conditions.	- Administer once-daily doses of prednisone in the morning to match body's normal cortisol secretion schedule. - Monitor growth pattern in children. Prednisone may retard bone growth.	N/A	N/A
Client Teaching needs (2)	- Educate care givers to use only measuring device that comes with the drug to help ensure accurate dosage. - Caution patient's caregiver to not to exceed recommended dosage or use other drugs containing acetaminophen at	- Warn caregivers not to exceed prescribed dose or frequency. - Educate caregivers to contact providers if dosage becomes less effective. - Inform caregivers to report signs and symptoms of allergic reaction	- Instruct patient to take prednisone with food to decrease GI distress and to take once-daily dose in the morning. - Emphasize importance of taking drug exactly as prescribed; taking more than prescribed increases risk of serious adverse reactions.	N/A	N/A

	the same time due to risk of liver damage.	such as difficulty swallowing, itching, and rash.			

Medication Reference (1) (APA):

Jones & Bartlett Learning. (2019). *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:**	**Alertness:** The patient was alert and active. **Orientation:** The patient was awake and oriented. **Distress:** The patient was not visibly distressed; he was calm and cooperative. **Overall appearance:** The patient was well-groomed and had a clean look. The patient was visibly smiling and laughing.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:** N/A **IV Assessment (If applicable to child):** **Size of IV:** **Location of IV:**	**Skin color:** Skin color was appropriate for ethnicity. **Character:** The patient's skin was intact, smooth, and soft. **Temperature:** The temperature of the skin was warm to the touch. **Turgor:** The turgor was elastic, standard for the patient's age. **Rashes:** None reported **Bruises:** None reported **Wounds:** None reported **Braden Score:** 15, Mild Risk **IV Assessment: N/A**

Date on IV: **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:** **IV Fluid Rate or Saline Lock:**	
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	**Head/Neck:** The trachea was midline; the oral mucosa was moist and intact. The uvula was midline, and no tonsil enlargement was noted. The tongue is pink with no lesions. **Ears:** The ears are symmetrical. The tympanic membrane is pink and grey bilaterally. **Eyes:** PERRLA, the patient's pupils constricted normally. EOM was normal. Sclera appears white with no inflammation or drainage bilaterally. **Nose:** The nose is symmetrical. No deviated septum was present. No presence of drainage. **Teeth:** The patient has no teeth. The gums were pink and moist. **Thyroid:** Thyroids were normal for age: no tracheal deviation or bulging lymph nodes.
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:** N/A	**Heart sounds:** The heart sounds had regular S1 and S2 sounds. **Cardiac rhythm (if applicable):** Cardiac rhythm was regular for age. **Peripheral Pulses:** Radial and pedal pulses are 3+ bilaterally and were noted at 166 and 161 beats per minute. **Capillary refill:** Capillary refills were regular, and the fingertips blanched white in less than 3 seconds.
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	**Accessory Muscle:** The accessory muscles were intermittently used during respiration. **Breath sounds:** All lobes were clear bilaterally**.** **Location:** The lung sounds were normal for the patient's age; high pitched breath sounds in all lobes bilaterally anteriorly and posteriorly. **Character:** The character was loud, high-pitched bronchial breath sounds and occasional wheezes. **Respiratory Rate:** 42 and 40

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:** N/A **Feeding tubes/PEG tube Y ☐ N ☒** **Type:** N/A	**Diet at home:** Regular diet (Breastmilk) **Current diet:** Regular diet (Breastmilk) **Height (in cm):** 58.1 cm **Auscultation Bowel sounds:** Bowel sounds were hypoactive in all four quadrants **Last BM:** 06/13/2022 **Palpation: Pain, Mass etc.:** The abdomen is soft and tender to palpation. The umbilical hernia is present and reducible. **Inspection:** - **Distention:** N/A - **Incisions:** N/A - **Scars:** N/A - **Drains:** N/A - **Wounds:** N/A
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** N/A **Size: N/A**	**Color:** The color of the urine was yellow. **Character:** The character of the urine was clear. **Quantity of urine:** 472 mL **Inspection of genitals:** The genitals were Intact, and no presence of lesions.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** 2; Low Risk **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment ☒** **Needs support to stand and walk ☒**	**Neurovascular status:** The patient was oriented to his ability. The patient was alert, awake, and oriented. The radial and pedal pulse are 3+ bilaterally. The skin was warm to the touch in the upper and lower extremities. The patient's skin color was normal and appropriate for their ethnicity. **ROM:** The upper and lower extremities are equal in strength bilaterally. **Supportive devices:** N/A **Strength:** The patient presented with upper and lower extremities bilaterally are equal in strength. **Fall Score:** 2; Low risk (Cummings Fall Scale)
NEUROLOGICAL: **MAEW: Y ☒ N☐**	**MAEW:** The upper and lower extremities were

PERLA: Y ☒ N☐ **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	equal in strength bilaterally. **PERRLA:** Present, pupils normally constricted for age **Strength Equal:** The upper and lower extremities were equal in strength bilaterally. **Orientation:** The patient was alert, awake, and oriented. **Mental Status:** The patient was alert and oriented. **Speech:** Unable to assess due to patient's age. **Sensory:** All senses were intact **LOC:** The patient was alert and oriented.
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):** Some coping methods consisted of using a pacifier, bright colored toys, music, and being surrounded by the mother and father. **Social needs:** The patient needs assistance with mobility, transportation, and feeding. **Personal/Family Data:** The patient is currently living with both his parents. His support system includes his mother, father, and two sisters.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1500	166 bpm	None reported	42 respirations per minute	37.2 C	98% RA
1645	161 bpm	None reported	40 respirations per minute	37.2 C	96% RA

Vital Sign Trends:

According to the vital signs taken at 1500 and 1645, there were abnormal findings related to the patient's pulse rate. At the time of the student's first and second vital sign assessment, the patient's vital signs (pulse rate) were not within normal ranges. At 1500, the patient's vital signs were: pulse 166 bpm, respirations 42 resp per minute, temperature 37.2 C, and oxygen 98% on room air. At 1645, the vital signs were: pulse 161, respirations 40 resp per minute, temperature

37.2 C, and 96% RA. The elevated pulse rate during the two times of assessments can be explained by spontaneous repositioning by the caregiver and proactively playing with his toys. The student did not take the patient's blood pressure at the time of these assessments because the nurse had taken this in the morning, and per the health care department's protocol, blood pressure is only to be done once a shift unless there is an order.

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

Pulse Rate	80-150 beats per minute (bpm)
Blood Pressure	50-75 mmHg systolic 30-45 mmHg diastolic
Respiratory Rate	25-55 respirations per minute
Temperature	36.5 C – 37.5 C
Oxygen Saturation	> 92 %

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

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

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1500	FLACC	N/A	0/10	N/A	No interventions were performed because the patient did not indicate he was in

					pain at the time of assessment.
1645	FLACC	N/A	0/10	N/A	No interventions were performed because the patient did not indicate he was in pain at the time of assessment.
Evaluation of pain status *after* intervention	N/A	N/A	N/A	N/A	No pain status was evaluated after the intervention because the patient did not indicate any signs of pain during assessments.
Precipitating factors: None was reported, and the patient did not indicate he was in pain during this clinical shift. **Physiological/behavioral signs:** None was reported, and the patient did not indicate he was in pain during this clinical shift—no signs of grimaced or furrowed brow facial expressions, crying that can't be comforted, or symptoms of respiratory distress.					

Intake and Output (1 points)

Intake (in mL)	**Output (in mL)**
Breastmilk: 570 mL Total Intake: 570 mL	Urine: 472 mL Total Output: 472 mL

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. Anterior fontanel closes by 12 to 18 months of age.
2. Posterior fontanel closes by 2 to 3 months of age.

3. Six to eight teeth should erupt in the infant's mouth by the end of the first year of age.

Age-Appropriate Diversional Activities

1. Appropriate play activities also include teething toys, nesting toys, and playing with blocks.
2. Appropriate play activities include rattles, soft stuffed toys, and playing with brightly colored toys.
3. Play should provide interpersonal contact and educational stimulation.

Psychosocial Development:

Which of Erikson's stages does this child fit?

According to Erikson's psychosocial developmental stages, T.M. is in the Trust vs. Mistrust stage since he is within the age range of zero to twelve months (Ricci et al., 2021).

What behaviors would you expect?

During the trust vs. mistrust stage, the behaviors to be expected from the patient include creating a sense of trust with his caregivers (Ricci et al., 2021). Trust can be formed through the caregivers responding to the patient's basic needs like feeding, changing diapers, cleaning, touching, holding, and talking to him (Ricci et al., 2021).

What did you observe?

During the assessments, the student observed the patient proactively playing with the bright-colored toys in his crib. The student also noticed the patient was interested in appropriate play activities, including rattles and soft stuffed toys. The caregivers were also attentive to the baby's needs which included when he would cry, the mother would instantly comfort him, and if

the patient showed signs of hungry, the mother would feed him. The mother was also quick to change his diaper and clean him up when it was time and would constantly talk to the baby throughout the day. The patient was seen to genuinely enjoy his caregiver's company and soothing voice and would consistently laugh and smile at everyone.

Cognitive Development:

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

According to Piaget's cognitive developmental stages, T.M. is in the sensorimotor stage since he is within the age range of zero to twenty-four months (Ricci et al., 2021).

What behaviors would you expect?

During the sensorimotor stage, the expected behaviors of the patient include using his sense and motor skills (both fine and gross), becoming familiarized with items by use, and using object permanence to learn about the world (Ricci et al., 2021).

What did you observe?

During the assessments, the student observed the patient using his senses and motor skills during play. The patient could control his head movements by turning his head in the direction of the sound of his name being said and grasping at his caregiver's fingers. The patient was also seen trying to grasp rattles and toys during play.

Vocalization/Vocabulary:

Development expected for child's age and any concerns?

The patient was able to show genuine interest and curiosity in his surroundings and could turn his head to the sound of his name and a rattle. The patient's respiratory distress may affect

his motor, language, cognitive, and mental development if the condition worsens as the patient develops (Hinkle & Cheever, 2022). As the patient goes through the stages of development, he may experience learning disabilities in school and have a higher risk of hospital admission for asthma (Hinkle & Cheever, 2022).

Any concerns regarding growth and development?

The patient currently weighs 5.32 kilograms (kg) at three months and is within the weight range for infants at three months. Infants at six months are encouraged to be around 7.9 kg for boys (Ricci et al., 2021). Therefore, the patient is growing at an appropriate rate. Also, the patient's posterior fontanel has closed since the patient is three months, and the posterior fontanel typically closes at two to three months (Ricci et al., 2021). There are currently no concerns regarding growth and development for this patient.

Developmental Assessment Reference (1) (APA):

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical Nursing* (15th ed.*)*. Wolters Kluwer Health Lippincott Williams & Wilkins

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

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 is related to excessive mucus, as evidenced by abnormal breath sounds (wheezing) and unproductive cough with mucus (Wayne, 2019).	The nursing diagnosis was chosen because mild wheezes were heard from the patient when assessing the patient's lungs.	1. Maintain the patient's airway by suctioning the airway as needed and repositioning the patient (Wayne, 2019). 2. Assess vital signs every two hours and report abnormal changes to the provider (Wayne, 2019).	1. The patient will maintain clear, open airways as evidenced by normal breath sounds and the ability to cough up secretions after treatments (Wayne, 2019).	- The patient responded well to the nurse's actions because the patient could breathe easier and had clear breath sounds upon auscultation. - Goal met: The patient maintained a patent airway by showing signs of normal breath sounds and consistent, clear respiration.
2. Impaired gas exchange related to ventilation perfusion changes as evidenced by irritability, abnormal breathing, and use of high flow high humidity nasal cannula (Wayne, 2019).	The nursing diagnosis was chosen because the patient showed labored breathing and mild use of accessory muscles when breathing.	1. Monitor the patient's respiration status noting the rates and depths of respiration (Wayne, 2019). 2. Elevate the head of the bed to patient tolerability to maximize lung expansion and improve air exchange in the	1. The patient will demonstrate increased air exchange and change from a high flow high humidity nasal cannula to room air by discharge (Wayne, 2019).	- The patient's caregivers responded well to the nurse's actions because they saw improvement in the patient's use of accessory muscles and noted stable breathing patterns during assessments.

		lungs (Wayne, 2019).		
3. Ineffective breathing patterns are related to decreased lung function, as evidenced by shortness of breath, tachycardia, and restlessness (Wayne, 2019).	The nursing diagnosis was chosen because the patient has a history of pneumonia and showed signs of restlessness and tachycardia during head-to-toe assessments.	1. Assess past medical history that can also be a contributory factor and monitor the trend for results (Wayne, 2019). 2. Comfort the patient and lower the anxiety during stages of respiratory distress (Wayne, 2019).	1. The patient's breathing pattern is back to standard rate and depth and will manifest a clear and adequate airway (Wayne, 2019).	- The patient responded well to the nurse's actions because they showed signs of ease when comforted by their caregivers in times of distress. - Goal met: The patient could maintain a clear and adequate airway on their own. The patient also returned to an average activity level and normal heart and lung sounds.
4. Deficient knowledge related to lack of knowledge about antibiotic treatment and over-the-counter medication, as evidenced by caregivers asking about the infant's home medications upon discharge (Wayne, 2019).	The nursing diagnosis was chosen because the caregiver asked for a list of prescribed medications and how to provide a home medication regimen proactively.	1. Provide an atmosphere of respect, openness, trust, and collaboration (Wayne, 2019). 2. Include the patient in creating the teaching plan, beginning with establishing objectives and learning goals at the session's beginning (Wayne, 2019).	1. The patient will see a need or purpose for learning to provide better care for their loved ones and will allow them to set goals during treatment so they are aware of the treatment plan and know what to anticipate (Wayne, 2019).	- The patient's caregivers responded well to the nurse's actions because they were able to teach back and demonstrate how to follow the antibiotic schedule and only give prescribed medication. - Goal met: Caregivers verbalized and demonstrated the importance of following antibiotic medication directions and a general understanding of

				all prescribed medications.

Other References (APA):

Wayne, G. (2019). *Ineffective Airway Clearance – Nursing Diagnosis & Care Plan.* Nurseslabs. https://nurseslabs.com/ineffective-airway-clearance/

Wayne, G. (2019). *Ineffective Breathing Pattern – Nursing Diagnosis & Care Plan*. Nurseslabs. https://nurseslabs.com/ineffective-breathing-pattern/

Concept Map (20 Points):

Subjective Data

The caregiver of the patient states," my son has shortness of breath and has been showing signs of using his accessory muscles to breathe for the last twenty-four hours"

Nursing Diagnosis/Outcomes

ctive airway clearance is related to excessive mucus, as evidenced by abnormal breath sounds (wheezing) and unproductive cough with mucus (Wayne, 2019).
The patient will maintain clear, open airways as evidenced by normal breath sounds and the ability to cough up secretions after treatments (Wayne, 2019).
Impaired gas exchange related to ventilation perfusion changes as evidenced by irritability, abnormal breathing, and use of high flow high humidity nasal cannula (Wayne, 2019).
The patient will demonstrate increased air exchange and change from a high flow high humidity nasal cannula to room air by discharge (Wayne, 2019).
Ineffective breathing patterns are related to decreased lung function, as evidenced by shortness of breath, tachycardia, and restlessness (Wayne, 2019).
The patient's breathing pattern is back to standard rate and depth and will manifest a clear and adequate airway (Wayne, 2019).
Deficient knowledge related to lack of knowledge about antibiotic treatment and over-the-counter medication, as evidenced by caregivers asking about the infant's home medications upon discharge (Wayne, 2019).
The patient will see a need or purpose for learning to provide better care for their loved ones and will allow them to set goals during treatment so they are aware of the treatment plan and know what to anticipate (Wayne, 2019).

Objective Data

Vital Signs:
- At 1500, the patient's pulse was 161 beats per minute, 42 respirations per minute, 37.2 degrees Celsius (temperature), and 96% oxygen saturation.
- At 1615, the patient's pulse was 166 beats per minute, respirations were 42, the temperature was 37.2 degrees Celsius, and oxygen was 98%.

Diagnostic Tests:
- Chest X-Ray and respiratory panel done at Sarah Bush Lincoln Hospital.

Client Information

The caregiver of the three-month-old Caucasian male infant presented to the hospital on 06/09/2022 with respiratory distress. The patient has a history of pneumonia and coughing. The patient has a previously been hospitalized for in-patient during his first month of life for pneumonia.

Nursing Interventions

Maintain the patient's airway by suctioning the airway as needed and repositioning the patient (Wayne, 2019).
Assess vital signs every two hours and report abnormal changes to the provider (Wayne, 2019).
Monitor the patient's respiration status noting the rates and depths of respiration (Wayne, 2019).
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