# N433 Care Plan

Lakeview College of Nursing

Hayley Barrie

## Demographics (3 points)

| **Date of Admission** | **Client Initials** | **Age (in years & months)** | **Gender** |
|---|---|---|---|
| 10/27/2022 | P.M. | 1 year 5 months | Female |
| **Code Status** | **Weight (in kg)** | **BMI** | **Allergies/Sensitivities (include reactions)** |
| Full code | 8.76 kg | The patient is in 45$^{th}$ percentile for height and weight. | The patient has no known allergies. |

## Medical History (5 Points)

**Past Medical History:**

**Illnesses:** The patient has been previously seen at her primary care giver's office for a high fever and shaking episodes. The patient was also seen at her primary care provider for a rash. The patient has a history of eczema and reactive attachment disorder.

**Hospitalizations:** The patient has not been hospitalized prior to current hospital admission.

**Past Surgical History:** The patient has not had any past surgeries.

**Immunizations:** The patient is up to date on vaccinations per the CDC guidelines.

**Birth History:**

**Complications (if any):** The patient was born without complications to a G3 P2. She was delivered via vaginal birth.

**Assistive Devices:** The patient does not use any assistive devices.

**Living Situation:** The patient currently lives with her mother and father. She has two sisters who also live with her. The patient lives in Champaign, Illinois.

## Admission Assessment

**Chief Complaint (2 points):** The patient's mother brought the patient in to the emergency room due to her child "breathing fast" and acting "sleepy".

**Other Co-Existing Conditions (if any):** Bronchiolitis

**Pertinent Events during this admission/hospitalization (1 points):** The patient has persistent moderate retractions. The patient was put on supplemental oxygen via nasal cannula. The patient was started at 8 liters and will have frequent respiratory assessments.

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

The patient presented to the emergency department on 10/27/2022 with her mother. The patient's mother voiced complaints of her child "breathing fast" and acting more "sleepy" than usual. The breathing was shallow and rapid. Retractions were present and visualized at the intercostals. An increased of work of breathing was also noted. The patient was taken earlier in the day to convenient care with congestion and a fever. The patient's mother stated that the patient was experiencing cold like symptoms for 3 days before the appointment. The convenient care physician suggested that the mother continue to monitor the patient for worsening symptoms such as difficulty breathing or lethargy. If worsening symptoms were present, the physician told the mother to take the patient to the emergency room. The mother continued to monitor the patient and noticed that the patient started to breath quicker. The patient's mother stated that she attempted to suction the patient's nose with a suction bulb, but it didn't seem to help. The mother stated that she gave Tylenol to decrease the patient's fever. The mother said that it was also worse when the child was laying supine and breathing seemed a bit improved when the child was sitting up. The patient's respiratory effort was severely diminished, and the patient seemed to be in distress.

## Primary Diagnosis

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

**Secondary Diagnosis (if applicable):** Bronchiolitis

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

Acute respiratory distress syndrome (ARDS) is a multifaceted condition of acute lung damage or obstruction which can lead to pulmonary injury or noncompliance. ARDS is a serious condition with a 40% mortality rate. ARDs can cause gas exchange impairment, decreased lung compliance, an increase in pulmonary vascular resistance, and alveolar collapse. ARDS starts with an initiation of macrophage cells to counter bacterial or viral products. These macrophages release cytokines which cause neutrophils to invade the tissues and cause inflammation. Though these cells assist with killing the bacteria or virus, they also injure the alveolar barrier. The alveolar space then swells and causes severe lung injury and collapse of the alveoli (Swenson & Swenson, 2021).

During acute respiratory distress syndrome (ARDS), there is an increase of fluid in the alveolar sacs and the lungs do not fill up with enough air. This means that not enough oxygen is reaching the bloodstream and the body's organs will be deprived of oxygen. This can cause multiple organ failures. Signs and symptoms of ARDS include increased work of breathing, confusion, tiredness, and severe shortness of breath. ARDS may also present as labored and rapid respirations. Patients with ARDS may have low blood pressure, increased heart rate, and increased respirations. Patients will also have low oxygen saturation (Mayo Clinic Staff, 2021). Common diagnostics include ABGs, pulse oximetry, and lung imaging tests. With ARDS these

tests will show low oxygen levels in the blood and possible infiltrates in the lungs (National Heart, Blood, and Lung Institute, 2022).

This patient was diagnosed using a respiratory pathogen panel and a pulse oximetry reading that was below 92%. Treatment for ARDS include, prone positioning, oxygenation, fluid management, and in extreme cases, ventilation. This patient received oxygenation as a treatment (American Lung Association, 2020). Potential complications associated with ARDS include tracheal stenosis and a decline in pulmonary function (DiSilvio et al., 2019). Signs and symptoms of tracheal stenosis include wheezing and difficulty eating (Temple Health, 2022). Nursing care to relieve wheezing include moisturizing the air, encouraging oral hydration, and administering bronchodilators as ordered (Patel et al., 2022). Nursing care to assist with difficulty eating include encouraging the patient to consume small frequent meals if able and to encourage oral fluids to prevent dehydration (Leader, 2022). Signs of declining pulmonary function include a decrease in forced vital capacity and a decreased forced expiratory volume, when a pulmonary function test is utilized (Silvestre et al., 2018). Symptoms of pulmonary function decline include chronic mucous production and anxiety (American Lung Association, 2021). Nursing care includes keeping the patient in an upright position to maintain an open and patent airway and to provide a calm reassuring presence to prevent anxiety which can cause further exacerbations of respiratory decline (Elsevier, 2022). Clinically, this patient had wheezes auscultated bilaterally, mucous production, and a low oxygen saturation rate of 90% upon admission, which directly correlates with the diagnosis of ARDS.

**Pathophysiology References (2) (APA):**

American Lung Association. (2020). *ARDS treatment and recovery*. https://www.lung.org/lung-health-diseases/lung-disease-lookup/ards/ards-treatment-and-recovery

American Lung Association. (2021). *Warning signs of lung disease*. https://www.lung.org/lung-health-diseases/warning-signs-of-lung-disease

DiSilvio B., Young M., Gordon A., Malik K., Singh A., & Cheema T. (2019). Complications and outcomes of acute respiratory distress syndrome. *Crit Care Nurs Q*, *42*(4), 349-361. https://doi.org/10.1097/CNQ.0000000000000275

Elsevier. (2022). *Dyspnea or respiratory distress*. https://elsevier.health/en-US/preview/dyspnea-respiratory-distress-peds-cpg

Leader, D. (2022). *Avoiding shortness of breath when eating*. Very Well Health. https://www.verywellhealth.com/avoid-shortness-of-breath-when-eating-915000

Mayo Clinic Staff. (2021). *ARDS*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/ards/symptoms-causes/syc-20355576#:~:text=Acute%20respiratory%20distress%20syndrome%20(ARDS,oxygen%20they%20need%20to%20function.

National Heart, Blood and Lung Institute. (2022). *Diagnosis*. https://www.nhlbi.nih.gov/health/ards/diagnosis

Patel, P. H., Mirabile, V. S., & Sharma, S. (2022). *Wheezing*. Statpearls. https://www.ncbi.nlm.nih.gov/books/NBK568738/

Silvestre, O. M., Nadruz, W., Querejeta Roca, G., Claggett, B., Solomon, S. D., Mirabelli, M. C., London, S. J., Loehr, L. R., & Shah, A. M. (2018). Declining lung function and

cardiovascular risk: The aric study. *Journal of the American College of Cardiology*, *72*(10), 1109–1122. https://doi.org/10.1016/j.jacc.2018.06.049

Swenson, K. E., & Swenson, E. R. (2021). Pathophysiology of Acute Respiratory Distress Syndrome and COVID-19 Lung Injury. *Critical care clinics*, *37*(4), 749–776. https://doi.org/10.1016/j.ccc.2021.05.003

Temple Health. (2022). *Airway stenosis*. https://www.templehealth.org/services/conditions/airway-stenosis

## Active Orders (2 points)

| Order(s) | Comments/Results/Completion |
|---|---|
| **Activity: Isolation** | The patient is ordered to be in isolation. The patient is complying and playing with toys independently in her hospital room. |
| **Diet/Nutrition: General diet** | The patient has no dietary restrictions. Since being admitted the patient has not had an appetite. The patient consumed 50% of her grilled cheese that she ordered for lunch. The patient also requested a goldfish for a snack, and she consumed 90% of the 1-ounce bag. The patient did not eat dinner. |
| **Frequent Assessments: Q4 vitals, Q8 respiratory assessment** | The patient is scheduled to have respiratory assessments every 8 hours. The patient also must have vital signs taken every 4 hours. |
| **Labs/Diagnostic Tests: COVID19, Pulse oximetry and RPP** | The patient has had COVID19 lab testing and was negative. The patient also received a respiratory pathogen panel lab draw which came back positive for rhinovirus and parainfluenza virus. The patient is also having pulse oximetry monitored to determine if oxygen needs to be titrated. |
| **Treatments: Supplemental O2 via nasal cannula** | The patient is being treated with supplemental oxygen at 5L via nasal cannula. The patient is being monitored for and is currently being weaned off oxygen until no supplemental oxygen is needed. |

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| **Other: N/A** | **N/A** |
| **New Order(s) for Clinical Day** | |
| **Order(s)** | **Comments/Results/Completion** |
| Consultation with child life specialist | The patient has a physician order to meet with a child life specialist for support with development during the hospitalization. The patient's mother agrees with the consultation. |
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**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** | 3.90-4.96 | N/A | N/A | |
| **Hgb** | 10.6-13.2 | N/A | N/A | |
| **Hct** | 32.4-39.5 | N/A | N/A | |
| **Platelets** | 199-367 | N/A | N/A | |
| **WBC** | 4.27-11.4 | N/A | N/A | |
| **Neutrophils** | 1.63-7.87 | N/A | N/A | |

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|---|---|---|---|---|
| **Lymphocytes** | 1.16-4.28 | N/A | N/A | |
| **Monocytes** | 0.19-0.81 | N/A | N/A | |
| **Eosinophils** | 0.03-0.47 | N/A | N/A | |
| **Basophils** | 0.01-0.05 | N/A | N/A | |
| **Bands** | 0-10% | N/A | N/A | |

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

| Lab | Normal Range | Admission or Prior Value | Today's Value | Reason For Abnormal |
|---|---|---|---|---|
| **Na-** | 136-145 | N/A | N/A | |
| **K+** | 3.5-5.1 | N/A | N/A | |
| **Cl-** | 98-107 | N/A | N/A | |
| **Glucose** | 74-100 | N/A | N/A | |
| **BUN** | 7-17 | N/A | N/A | |
| **Creatinine** | 0.55-1.02 | N/A | N/A | |
| **Albumin** | 3.8-5.4 | N/A | N/A | |
| **Total Protein** | 6.0-8.0 | N/A | N/A | |
| **Calcium** | 8.8-10.8 | N/A | N/A | |
| **Bilirubin** | 0.2-1.2 | N/A | N/A | |
| **Alk Phos** | 9-500 | N/A | N/A | |
| **AST** | 5-34 | N/A | N/A | |

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|---|---|---|---|---|
| **ALT** | 0-55 | N/A | N/A | |
| **Amylase** | 19-76 | N/A | N/A | |
| **Lipase** | 7-59 | N/A | N/A | |

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

| Lab Test | Normal Range | Admission or Prior Value | Today's Value | Reason for Abnormal |
|---|---|---|---|---|
| **ESR** | 3-15 | N/A | N/A | |
| **CRP** | 0.00-0.50 | N/A | N/A | |
| **Hgb A1c** | <7.5 | N/A | N/A | |
| **TSH** | 0.45-4.5 | N/A | N/A | |

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

| Lab Test | Normal Range | Admission or Prior Value | Today's Value | Reason for Abnormal |
|---|---|---|---|---|
| **Color & Clarity** | Yellow and clear | **N/A** | **N/A** | |
| **pH** | 4.5-8 | **N/A** | **N/A** | |
| **Specific Gravity** | 1.000-1.030 > | **N/A** | **N/A** | |
| **Glucose** | Negative | **N/A** | **N/A** | |
| **Protein** | Negative | **N/A** | **N/A** | |
| **Ketones** | Negative | **N/A** | **N/A** | |
| **WBC** | 0-25 | **N/A** | **N/A** | |
| **RBC** | 0-20 | **N/A** | **N/A** | |
| **Leukoesterase** | Negative | **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** | Negative | N/A | N/A | |
| **Blood Culture** | Negative | N/A | N/A | |
| **Sputum Culture** | Negative | N/A | N/A | |
| **Stool Culture** | Negative | N/A | N/A | |
| **Respiratory ID Panel** | Negative | Positive for rhinovirus and parainfluenza virus | N/A | This panel is used to diagnose respiratory viruses and is administered via nasopharyngeal swab. A positive result indicates that there is presence of the virus in the respiratory tract (National Library of Medicine, 2021). This patient had a positive result for the rhinovirus and parainfluenza virus. |
| **COVID-19 Screen** | Negative | Negative | N/A | |

**Lab Correlations Reference (1) (APA):**

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

National Library of Medicine. (2021). *Respiratory pathogen panel*. Medline Plus. https://medlineplus.gov/lab-tests/respiratory-pathogens-panel/

## Diagnostic Imaging

**All Other Diagnostic Tests (5 points):** There was no diagnostic tests used on this patient.

**Diagnostic Test Correlation (5 points):** There was no additional diagnostic imaging used on this patient.

**Diagnostic Test Reference (1) (APA): N/A**

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

| **Brand/ Generic** | albuterol sulfate/ AccuNeb (Jones & Bartlett Learning, 2021). | acetaminophen/ Tylenol | Ibuprofen/ Advil | Sodium Chloride 65% /Ayr Saline | Sucrose 24% /Phebra |
|---|---|---|---|---|---|
| **Dose** | 2.5 mg | 160 mg | 88 mg | 1 drop | 1 Pacifier dip |
| **Frequency** | Q 4 hours | Q 4 hours or PRN | Q 6 hours or PRN | PRN | PRN |
| **Route** | Inhalation via nebulizer | Oral | Oral | Nasal | Oral |
| **Classification** | The pharmacological class is adrenergic. The therapeutic class is a bronchodilator (Jones & Bartlett Learning, 2021). | The pharmacological class is non salicylate, and the therapeutic class is antipyretic and nonopioid analgesic (Jones & Bartlett Learning,2021). | The therapeutic class is analgesic, and the pharmacological class is NSAIDs (Jones & Bartlett Learning, 2021). | The class of sodium chloride is electrolytes and miscellaneous respiratory agents (Multum, 2021). | Sucrose belongs to the o-glycosyl compounds group (Bolisetty & Sin, 2021). |
| **Mechanism of Action** | Albuterol attaches to bronchial cell membrane receptors and stimulates enzymes to | Acetaminophen blocks the production of prostaglandins by inhibiting the cyclooxygen | Ibuprofen works by reducing inflammatory responses which reduces | Sodium chloride works by regulating the water levels in the body. | The mechanism of action for sucrose is an increase in sensorial stimulation |

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| | convert ATP to cAMP. This causes the bronchial smooth muscle cells to relax and stops the release of histamine (Jones & Bartlett Learning, 2021). | ase enzyme. This interferes with pain impulses in the central nervous system. Acetaminophen also inhibits prostaglandin synthesis and acts on the temperature regulating centers of the brain (Jones & Bartlett Learning, 2021). | inflammation and decreases pain (Jones & Bartlett Learning, 2021). | Sodium is also influential when it comes to muscle contractions and nerve impulses (Multum, 2021). | and an increase in endogenous opioids (Bolisetty & Sin, 2021). |
| **Reason Client Taking** | The patient is taking this medication to open her airways and relieve wheezing. | This patient is taking this medication to relieve mild pain. | This patient is taking ibuprofen for mild pain relief | This patient is taking this medication to prevent dryness in the nose and to clear dried up mucous (Hakim & Barnes, 2022). | The patient is taking this medication as a pain relief method. |
| **Concentration Available** | Albuterol is available in 0.63 mg doses (Jones & Bartlett Learning, 2021). | This medication is available in 160 mgs per 5 mL (Jones & Bartlett Learning, 2021). | This medication is available in 100 mg per 5 mL (American Academy of Pediatrics, 2021). | The concentration available is 0.65 % in 1 mL of solution. | The concentration is 24% in 1mL of solution (Bolisetty & Sin, 2021). |
| **Safe Dose Range Calculation** | The safe dosage of Albuterol is a dose of 0.63 mg to 1.25 | The safe dosage of acetaminophen for a 17-month-old is | The safe dosage of ibuprofen for a 17-month-old is not to | The safe dosage for sodium chloride nasal spray is | Infants should be given 0.5 – 1mL 4 times a day |

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| | mg three or four times a day. The range is 1.89 mg – 5 mg per day (Jones & Bartlett Learning, 2021). | 160 mg per dose every 4 hours and that should not be exceeded (Jones & Bartlett Learning, 2021). | exceed 4 dosages. (American Academy of Pediatrics, 2021). | 2 sprays in each nostril as needed (Hakim & Barnes, 2022). | (Starship Child Health, 2019). |
| **Maximum 24-hour Dose** | The maximum 24-hour dose is 5 mg (Jones & Bartlett Learning, 2021). | The maximum 24-hour dose for acetaminophen is 800 mg (Jones & Bartlett Learning, 2021) | The maximum dose for a 17-month-old is 400 mg per day (American Academy of Pediatrics, 2021). | The dosage should not exceed more than 2 sprays 3 times a day (Hakim & Barnes, 2022) | The maximum 24 hour dose is 4 mL per day (Starship Child Health, 2019). |
| **Contraindications (2)** | Contraindications include those with a history of seizures or patients who have extreme tachycardia (Jones & Bartlett Learning, 2021). | Contraindications of acetaminophen include increased AST and ALT levels and liver disease (Jones & Bartlett Learning, 2021). | Contraindications for ibuprofen include thrombocytopenia and asthma (Jones & Bartlett Learning, 2021). | Contraindications include pleural effusions and hypertension (Multum, 2021). | Contraindications include altered swallowing reflexes and glucose malabsorption (Starship Child Health, 2019). |
| **Side Effects/ Adverse Reactions (2)** | Side effects of albuterol include cardiac arrhythmias and hyperglycemia (Jones & Bartlett Learning, 2021). | Side effects of acetaminophen include hepatotoxicity and diarrhea (Jones & Bartlett Learning, 2021). | Side effects of ibuprofen include gastrointestinal bleeding and rashes (Jones & Bartlett Learning, 2021). | Side effects of sodium chloride nasal spray include nausea and swelling of the ankles, hands, or feet (Multum, 2021). | The adverse effects associated with glucose include bradycardia and brief apneas (Bolisetty & Sin, 2021). |
| **Nursing Consideratio** | Nursing consideration | Nursing consideration | Nursing consideration | Nursing consideration | Nursing consideration |

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| **ns (2)** | s for albuterol include using a spacer during administration, to ensure adequate drug administration, and monitoring serum potassium levels due to the possibility of transient hypokalemia (Jones & Bartlett Learning, 2021). | s before acetaminophen administration include monitoring renal function especially for blood in the urine and check liver function labs (Jones & Bartlett Learning, 2021). | s for ibuprofen include monitoring for signs of gastrointestinal bleeding such as black tarry stools, and to monitor blood pressure due to ibuprofens tendency to cause hypertension (Jones & Bartlett Leaning, 2021). | s include testing sodium levels in the blood before administration and to test liver enzymes (Multum, 2021). | include administering the sucrose 2 minutes before any painful procedures and to encourage the infant to suck on the pacifier for better effect (Bolisetty & Sin, 2021). |
| **Client Teaching needs (2)** | The patient should be taught how to properly wash the mouthpiece to prevent infection. The patient should be educated to shake the cannister before administering the albuterol (Jones & Bartlett Learning, 2021). | The patient should be educated about the signs of hepatotoxicity such as easily bruising or bleeding. The patient should also be educated to not exceed the 800 mg dose daily to prevent liver damage or injury (Jones & Bartlett Learning, 2021). | The patient should be educated about taking the drug with food to reduce stomach upset. The patient should also be educated about signs of intestinal bleeding such as coffee ground emesis or tarry stools (Jones & Bartlett Learning, 2021). | The patient needs to be educated to stop taking sodium chloride if stomach pain occurs. The patient should also be educated to notify the physician if any swelling is present. This can be a sign of fluid overload or cardiac issues (Multum, 2021). | The patient should be educated to watch for sucrose intolerance such as bloating or diarrhea (Deville, 2019). The patient should also be educated that the sucrose solution should only be administered in a hospital setting (Starship |

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|---|---|---|---|---|---|
| | | | | | Child Health, 2019). |

**Medication Reference (1) (APA):**

American Academy of Peditrics. (2021). *Ibuprofen dosing table for fever and pain*. Healthy Children. https://www.healthychildren.org/English/safety-prevention/at-home/medication-safety/Pages/Ibuprofen-for-Fever-and-Pain.aspxhttps://www.anmfonline.org/wp-content/uploads/2021/07/Sucrose_ANMFv2.0_20210715.pdf

Bolisetty & Sin. (2021). *Sucrose 24%*. ANMF Consensus Group. https://www.anmfonline.org/wp-content/uploads/2021/06/sucrose-27022017-1.0.pdf

Deville, L. (2019). *Sucrose intolerance*. Dr. Lauren Deville Naturopathic Doctor. https://www.drlaurendeville.com/articles/sucrose-intolerance/

Hakim, R. C., & Barnes, A. (2022). *Sodium chloride nasal spray*. Good RX. https://www.goodrx.com/sodium-chloride-non-prescription/what-is

Jones & Bartlett Learning. (2022). *2022 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning

Lexicomp. (2020). *Wolters Kluwer*. https://online.lexi.com/lco/action/home_

Multum, C. (2021). *Sodium chloride*. Drugs.com. https://www.drugs.com/mtm/sodium-chloride-oral.html

Starship Child Health. (2019). *Sucrose Analgesia*. Starship. https://starship.org.nz/guidelines/sucrose-analgesia/

## Assessment

**Physical Exam (18 points) Highlight Abnormal Pertinent Assessment Findings**

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|---|---|
| **GENERAL:** | The patient is alert and oriented to person, |

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| **Alertness:**<br>**Orientation:**<br>**Distress:**<br>**Overall appearance:** | place, and situation.<br>The patient is not in distress.<br>The patient overall seemed tired, but respiratory effort is improving. |
| **INTEGUMENTARY:**<br>**Skin color:**<br>**Character:**<br>**Temperature:**<br>**Turgor:**<br>**Rashes:**<br>**Bruises:**<br>**Wounds:** .<br>**Braden Score:**<br>**Drains present: Y☐ N ☒**<br>**Type:**<br><br>**IV Assessment (If applicable to child):**<br>**Size of IV:**<br>**Location of IV:**<br>**Date on IV:**<br>**Patency of IV:**<br>**Signs of erythema, drainage, etc.:**<br>**IV dressing assessment:**<br>**IV Fluid Rate or Saline Lock:** | The patient's skin color is normal for her race/ethnicity. Skin is warm and dry. There were no signs of skin breakdown. Adequate hydration was evident by skin turgor. There were no rashes present. There were no bruises present. The patient has no wounds and no skin drainage.<br><br>Braden Score: 20. This suggests that there is very little risk for skin breakdown.<br><br>The patient has no IV present. |
| **HEENT:**<br>**Head/Neck:**<br>**Ears:**<br>**Eyes:**<br>**Nose:**<br>**Teeth:**<br>**Thyroid:** | The patient's head is normocephalic. The patient also has a symmetrical face. The trachea is midline and there are no deviations present. There are no abnormalities present on the neck. The patient has dark brown hair. The hair is evenly distributed. The patients' ears were free from drainage bilaterally and appeared symmetrical. The patient displayed no evidence of visual impairment. There was no drainage of the conjunctiva bilaterally. Sclera was white bilaterally. Some nasal drainage was present. The nostrils were slightly red. There was no deviation of the nose present. Teeth are white and intact. The oral mucosa is pink, moist, and free of lesions. The thyroid was free from enlargement. |
| **CARDIOVASCULAR:**<br>**Heart sounds:**<br>**S1, S2, S3, S4, murmur etc.**<br>**Cardiac rhythm (if applicable):**<br>**Peripheral Pulses:**<br>**Capillary refill:**<br>**Neck Vein Distention: Y ☐ N ☒** | The S1 and S2 heart sounds were auscultated. There were no adventitious sounds noted. No murmurs were present. The patient had normal cardiac rate and rhythm. All peripheral pulses were felt and are 2+ bilaterally. Capillary refill is less than 3 seconds in the lower and upper extremities. No jugular vein distention was |

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| **Edema Y ☐ N ☒**<br>**Location of Edema:** | present. No edema was present in upper and lower extremities bilaterally. |
| **RESPIRATORY:**<br>**Accessory muscle use: Y☐ N ☒**<br>**Breath Sounds: Location, character** | The patient has course crackles located in the bases of the lobes bilaterally. No accessory muscle use is present. Breath sounds indicate inspiratory wheezing present. |
| **GASTROINTESTINAL:**<br>**Diet at home:**<br>**Current diet:**<br>**Height (in cm):**<br>**Auscultation Bowel sounds:**<br>**Last BM:**<br>**Palpation: Pain, Mass etc.:**<br>**Inspection:**<br>**Distention:**<br>**Incisions:**<br>**Scars:**<br>**Drains:**<br>**Wounds:**<br>**Ostomy: Y ☐ N ☒**<br>**Nasogastric: Y ☐ N ☒**<br>**Size:**<br>**Feeding tubes/PEG tube Y ☐ N ☒**<br>**Type:** | The patient consumes a general diet at home. The patient is also currently eating a general diet while admitted. The patient has no dietary restrictions currently. The patient is 79.8 cm tall. The auscultation of the bowel sounds indicated motility in all four quadrants. The patient's last bowel movement was 10/28/2022. Upon palpation of the abdomen, there were no indications of pain such as guarding. No masses or organomegaly were present. There were no incisions, scars, wounds, or drains. There was no distention present. |
| **GENITOURINARY:**<br>**Color:**<br>**Character:**<br>**Quantity of urine:**<br>**Pain with urination: Y ☐ N ☒**<br>**Dialysis: Y ☐ N ☒**<br>**Inspection of genitals:**<br>**Catheter: Y ☐ N ☒**<br>**Type:**<br>**Size:** | The patient's urine is clear and colorless. The patient had no pain with urination. She voided 121 mL during the shift. There were no genital abnormalities or rashes present. |
| **MUSCULOSKELETAL:**<br>**Neurovascular status:**<br>**ROM:**<br>**Supportive devices:**<br>**Strength:**<br>**ADL Assistance: Y☒ N ☐**<br>**Fall Risk: Y ☐ N☐**<br>**Fall Score: 7**<br>**Activity/Mobility Status:**<br>**Independent (up ad lib) yes**<br>**Needs assistance with equipment: no** | There was active range of motion bilaterally in both upper and lower extremities. There were no deficits in the patient's neurovascular status. The patient does not use any supportive devices. The patient has symmetrical strength in all extremities. The patient is able to walk by themselves and does need some assistance walking downstairs, which is normal for development (Haka-Ikse, 2018). The patient has a fall score of 7 and is not considered a fall risk. |

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|---|---|
| **Needs support to stand and walk: Needs some support, but normal for development (Haka-Iske, 2018).** | |
| **NEUROLOGICAL:**<br>**MAEW: Y ☒ N☐**<br>**PERLA: Y ☒ N☐**<br>**Strength Equal: Y ☒ N ☐ if no -**<br>**Legs ☐ Arms ☐ Both ☐**<br>**Orientation:**<br>**Mental Status:**<br>**Speech:**<br>**Sensory:**<br>**LOC:** | The patient is able to display movement in all extremities. There are no neurological abnormalities present that indicate issues with vision or movement. The patient is A& O x3 and has age-appropriate speech and development. The patient did not display any abnormalities related to sensory. |
| **PSYCHOSOCIAL/CULTURAL:**<br>**Coping method(s) of caregiver(s):**<br>**Social needs (transportation, food, medication assistance, home equipment/care):**<br>**Personal/Family Data (Think about home environment, family structure, and available family support):** | The patient enjoyed being with their mother and playing with her. The patient copes by hugging her mother and being comforted. The mother spent the evening with the patient and is present at the bedside often. The patient enjoys playing with her sisters and her grandmother while she is at home. The patient will be discharged when she is not dependent on supplemental oxygen. No social needs are anticipated for this patient. |

Haka-Iske. (2018). *Milestones: Your toddler's development*. Parents Canada. https://www.parentscanada.com/toddler/milestones-toddlers-1-3-years-watching-your-child-develop/

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

| Time | Pulse | B/P | Resp Rate | Temp | Oxygen |
|---|---|---|---|---|---|
| **1400** | **140 bpm** | **90/66 mmHg** | **22 respirations/minute** | **37.1 C (Axillary)** | **99% on 5L nasal cannula** |
| **1700** | **150 bpm** | **100/65 mmHg** | **21 respirations/minute** | **37.5 C (Axillary)** | **100% on 5 L nasal cannula** |

**Vital Sign Trends:** The patient's pulse was increased and became more tachycardiac throughout. This may be due to albuterol administration, which can cause an increase in heart rate (Jones & Bartlett Learning, 2021). The patient's blood pressure remained stable throughout the shift. The patient's respirations were typical and stable throughout. The patient is doing well on supplemental oxygen and her O2 saturation remained within normal limits.

Reference:

Jones & Bartlett Learning. (2022). *2022 Nurse's drug handbook* (19th ed.). Jones & Bartlett Learning

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

| | |
|---|---|
| **Pulse Rate** | The normal pulse rate for a 17-month-old is 70-120 bpm (Healthwise, 2022). |
| **Blood Pressure** | The normal blood pressure for a 17-month-old is 90-110 systolic and 55-70 diastolic (Healthwise, 2022). |
| **Respiratory Rate** | The normal respiration rate for a 17-mont-old child is 20-30 respirations/minute (Healthwise, 2022). |
| **Temperature** | The normal temperature range for a 17-month-old child is 97.8 – 99.5 orally (Healthwise, 2022). |
| **Oxygen Saturation** | Normal oxygen saturation for a 17-month-old is between 95% and 100% (Andrade et al., 2022). |

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

Andrade, V., Andrade, F., & Riofrio, P. (2022). Pulse oximetry curves in healthy children living at moderate altitude: A cross-sectional study from the Ecuadorian Andes. *BMC Pediatrics*, *20*, 440. https://doi.org/10.1186/s12887-020-02334-z

Healthwise. (2022). *Vital signs in children*. Health Link British Colombia. https://www.healthlinkbc.ca/health-topics/vital-signs-children

**Pain Assessment, 2 sets (2 points)**

| Time | Scale | Location | Severity | Characteristics | Interventions |
|---|---|---|---|---|---|
| **1400** | **rFLACC** | **This patient has no localized pain at this time.** | **This patient has no pain severity at this time.** | **This patient has no pain characteristics at this time.** | **No pain interventions were necessary due to the patient not being in pain at this time.** |
| **Evaluation of pain status *after* intervention** | **1700** | **rFLACC** | **The patient has no localized pain currently.** | **The patient has no pain severity at this time.** | **The patient has no pain characteristics at this time.** |
| **Precipitating factors:** The patient was not in any pain. There were no precipitating factors noted.<br>**Physiological/behavioral signs:** The patient was not in any pain; therefore, she was not displaying any physiological or behavior signs of being in pain. | | | | | |

**Intake and Output (1 points)**

| Intake (in mL) | Output (in mL) |
|---|---|
| **120 mL of whole milk**<br>**140 mL of water**<br><br>**Total: 260 mL during rotation** | **Wet diaper- approximately 75 mL**<br>**Wet diaper – approximately 46 mL**<br><br>**Total: 121 mL during rotation** |

**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. A child who is 17 months old should be able to clap when they are excited (CDC, 2022).
2. A child who is 17 months old should be using their fingers to self-feed (CDC, 2022).
3. A child who is 17 months old should show affection to a loved one by giving hugs (CDC, 2022).

**Age Appropriate Diversional Activities**

1. An appropriate diversional activity is coloring with thick crayons and coloring paper (Holman et al., 2019).
2. An age-appropriate diversional activity for a 17-month-old child is playing with blocks (Holman et al., 2019).
3. An appropriate diversional activity is looking at books (Holman et al., 2019).

**Psychosocial Development:**

**Which of Erikson's stages does this child fit?** The patient fits into the trust versus mistrust stage (Lewis, 2020).

**What behaviors would you expect?** This student would expect this patient to be dependent on the caregiver to make sure their needs are met. If this is met, then the patient will feel safe and secure. If these needs aren't met, the patient will have a hard time trusting others (Lewis, 2020).

**What did you observe?** This student observed the patient getting her needs met from her mother. Her mother was very attentive and made sure to comfort her. The patient would hug her mom when she was scared.

**Cognitive Development:**

**Which stage does this child fit, using Piaget as a reference?** The patient fits into the sensorimotor stage of Piaget's cognitive development (Nortje, 2021).

**What behaviors would you expect?** This student would expect the patient to try new behaviors related to what they have observed in their social environment. I would also expect this patient to begin solving problems (Nortje, 2021).

**What did you observe?** This student observed this patient notice that the nurses would give her more positive attention when she would turn away and hug her mom. This is a change in behavior directly related to the patient's social environment.

**Vocalization/Vocabulary:**

**Development expected for child's age and any concerns?** This patient should be babbling with a few recognizable words in their speech (Kilroy, 2020). No concerns are noted. The patient was babbling, and their speech seemed parallel to normal development.

**Any concerns regarding growth and development?**

There are no concerns regarding growth and development at this time.

**Developmental Assessment Reference (1) (APA):**

CDC. (2022). *Important milestones*: *Your baby by 15 months old*. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/actearly/milestones/milestones-15mo.html

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.

Kilroy, D. (2020). *Your 17-month-old's language and cognitive development*: *All talk.* Baby Center. https://www.babycenter.com/toddler/development/your-17-month-olds-language-and-cognitive-development-all-ta_1213788

Lewis, R. (2020). *Stage 1*: *Trust vs. mistrust*. Healthline. https://www.healthline.com/health/parenting/erikson-stages#1-trust

Nortje, A. (2021). *Piaget's stages*: *4 stages of cognitive development & theory*. Positive Psychology. https://positivepsychology.com/piaget-stages-theory/

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

| **Nursing Diagnosis**<br>• Include full nursing diagnosis with "related to" and "as evidenced by" components<br>• Listed in order by priority – highest priority to lowest priority pertinent to this client. | **Rational**<br>• Explain why the nursing diagnosis was chosen | **Interventions (2 per dx)** | **Outcomes** | **Evaluation**<br>• How did the Client/family respond to the nurse's actions?<br>• Client response, status of goals and outcomes, modifications to plan. |
|---|---|---|---|---|
| **1.** Ineffective airway clearance | This nursing diagnosis was | 1. Encourage patient to increase | 1. The outcome | 1. The patient's mother was very |

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| related to mucous obstructing the airway as evidenced wheezing. | chosen because the patient is having difficulty with oxygen saturation due to increased mucous production. This mucous is obstructing the airway and the patient is unable to cough the mucous out effectively. | fluid intake to help mobilize secretions (Wayne, 2022).<br><br>2. Maintain humidified oxygen as ordered (Wayne, 2022). | would be that the patient increases fluid intake to increase the motility of the secretions and that they would be easier to expectorate (Wayne, 2022).<br><br>2. The outcome would be that the patient would receive humidification which would help reduce congestion and allow secretion expectoration (Wayne, 2022). | responsive to the actions. The mother agreed and offered her child fluids more often. The patient did drink more than she did during the morning shift. The goal and the outcome were met. There were no modifications to the plan.<br><br>2. The patient responded well to the humidified oxygen. The patient did have less congestion. The outcomes were met. There were no modifications to the plan. |
| 2. Impaired gas exchange related to an increase of mucous build up in the lungs as evidenced by an oxygen saturation below 90% | This was chosen because the alveoli collapsed due to the increase in mucous and this can cause perfusion without ventilation (Wayne, 2022). | **1.** Suction as needed to clear secretions. This patient cannot effectively clear their own airway, so it is imperative to suction any mucous obstructions (Wayne, 2022). | **1.** The patient was suctioned using a bulb suction frequently. This suctioning helped to eliminate the built up mucous. This helps to ensure that the patient is receiving adequate oxygenation (Wayne, | **1.** The patient was very responsive to this intervention. The patient did not like to be suctioned, but after the suctioning the patient seemed to breath easier. The patient also needed less FIO2. The goal and the outcome were both met. There were no modifications needed.<br><br>2. The patient did |

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|---|---|---|---|---|
| | | **2.** Schedule rest periods between activities of daily living. This prevents fatigue that activities can cause and promotes an increase in oxygen consumption (Wayne, 2022). | 2022).<br><br>2. The outcome is that the patient does not overexert herself and that the patient is able to breathe effectively which increases oxygenation (Wayne, 2022). | well with the rest periods. The patient rested frequently which built up her energy. This conservation of energy helped her breathing rate and rhythm. This increased oxygenation for the patient. The goal of increased oxygen saturation and the outcome were both met. No modifications are necessary. |
| **3.** Anxiety related to declining health status as evidenced by the patient wanting mom to stay in the room. | This diagnosis was chosen because anxiety needs to be controlled to decrease tachycardia and dyspnea (Martin, 2022). | **1.** Provide a calm environment for the child to reduce stimulation (Martin, 2022).<br><br>**2.** Provide distraction techniques during uncomfortable procedures. These distraction methods include having the child watch videos or look at picture books (Ricci et al., 2021). | **1.** The patient was in a dark environment with low stimulation. The patient seemed to have lessened restlessness and anxiety, which paralleled the desired outcome.<br><br>2. The patient was partially distracted from any uncomfortable procedures. The patient allowed assessments when they were looking at books or watching | **1.** The patient and her family responded well to the nurse's actions. The patient seemed to like the lights dimmed and enjoyed the quiet environment. This seemed to lessen her anxiety. The goal and outcomes were met and there were no modifications needed.<br><br>2. The patient and her mother seemed very responsive to the intervention. The mother even encouraged the patient to look at the video on her phone. The patient seemed to be partially distracted. |

| | | | | |
|---|---|---|---|---|
| | | | videos. | The goal was met. The outcomes were met; however, some modifications were made. The patient couldn't look at the phone or books during some parts of the assessment. The mother began to stroke her daughter's hair as a distraction and calming technique. |
| **4.** Interrupted family processes related to the child being hospitalized as evidenced by verbalization of parental stress. | The mother verbalized feelings of stress due to having to be at the hospital and worrying about her other kids. This nursing diagnosis is appropriate because stress can cause parental dysfunction, excessive worry, and parental withdraw (Martin, 2022). | **1.** Assess the mother of coping skills and educate about positive coping. This helps to promote the use of healthy coping skills during a stressful situation (Wayne, 2022).<br><br>**2.** Explore the family's feelings about the child's diagnosis. This can help open discussions about sources of stress (Wayne, 2022). | The outcome would be that the patient understands the sources of stress and is able to identify positive coping related to that stress. | 1. The patient's mother responded well to this intervention. The patient was able to identify positive coping mechanisms and said she liked to go on walks when feeling overwhelmed. The goal was met, and the outcome was met. No modifications were necessary.<br><br>2. The patient's mother responded well to this intervention. The mother was able to converse openly about the causes of stress that the ARDS diagnosis caused. The outcome was met. The goal of understanding was |

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|---|---|---|---|---|
| | | | | met. No modifications were needed. |

**Other References (APA):**

Martin, P. (2022). *8 asthma nursing care plans*. Nurselabs. https://nurseslabs.com/asthma-nursing-care-plans/7/

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

Wayne, G. (2022). *Impaired gas exchange nursing care plans*. Nurselabs. https://nurseslabs.com/impaired-gas-exchange/

**Concept Map (20 Points):**

**Subjective Data**

The patient's mother states that the patient is "breathing faster" and shallower.

The patient's mother states that the patient appears "tired".

The patient's mother states that the patient is eating more frequently than when first admitted.

**Objective Data**

The pulse is 140 beats per minute.
The blood pressure is 90/66.
The respirations are 22 per minute.
The temperature was 37.1 C taken via axilla.
The patient's O2 saturation levels were 99% on 5 liters.

**Client Information**

The patient is a 17-month-old female who was admitted on 10/2/2022 for ARDS. Her mother is present at the bedside. The patient is currently on 5 L of O2 saturation and will be discharged when successfully weaned from supplemental oxygen.

**Nursing Diagnosis/Outcomes**

Ineffective airway clearance related to mucous obstructing the airway as evidenced wheezing is the nursing diagnosis. The outcome would be that the patient increases the intake of fluids to increase the exit of the mucous secretions and that they would be simpler to clear out (Wayne, 2022).

Impaired gas exchange related to an increase of mucous build up in the lungs as evidenced by an oxygen saturation below 90% is the nursing diagnosis. The outcome is that the patient will not do too much and that the patient can breathe more effectively which boosts oxygenation (Wayne, 2022).

Anxiety related to declining health status as evidenced by the patient wanting mom to stay in the room. The patient looked to have diminished agitation and anxiety, which mirrored the desired outcome.

Interrupted family processes related to the child being hospitalized as evidenced by verbalization of parental stress is the nursing diagnosis. The outcome is that the patient recognizes the causes of stress and is able to find positive coping behaviors related to that stress.

**Nursing Interventions**

Nursing interventions include encouraging the patient to increase fluid intake to help clear out mucous secretions and maintaining humidified oxygen as ordered (Wayne, 2022).
Suctioning as needed to clear secretions is another nursing intervention. This patient can't successfully clear their own airway, so it is crucial to clear any mucous obstructions (Wayne, 2022).
Identifying the family's feelings about the child's diagnosis is another nursing intervention. This can help open discussions about triggers of stress (Wayne, 2022).
Assessing the mother of the coping skills and educate about positive coping is another intervention. This improves the promotion of healthy coping management during a traumatic time (Wayne, 2022).
Exploring the family's feelings about the child's diagnosis is another nursing diagnosis. This can improve discussions about what is causing the stress (Wayne, 2022).