N433 Care Plan #

Lakeview College of Nursing

Name

## Demographics (3 points)

| Date of Admission 03/07/23 | Client Initials PM | Age (in years & months) Six years old and four months | Gender Male |
|---|---|---|---|
| Code Status Full code | Weight (in kg) 25.8kg | BMI 16.16 | Allergies/Sensitivities (include reactions) None |

## Medical History (5 Points)

**Past Medical History:** Polydactyly

   **Illnesses:** rhinovirus, adenovirus, pneumonia

   **Hospitalizations:** N/A

**Past Surgical History:** N/A

**Immunizations:** unable to obtain information due to parents not being in the room.

**Birth History**

   **Complications (if any):** None

**Assistive Devices:** N/A

**Living Situation:** lives at home with mother and father

## Admission Assessment

**Chief Complaint (2 points):** shortness of breath

**Other Co-Existing Conditions (if any):** none

**Pertinent Events during this admission/hospitalization (1 points):** The patient received his

daily medications and was detected to have adenovirus.

**History of present Illness (OLD CARTS) (10 points):** the patient presented with a cough at SF

sacred Medical Center yesterday but was eventually transferred to Carle hospital. When the

patient arrived at Carl hospital, the patient was hypoxic with an O2 sat of 88% and a temperature

of 99.6 Fahrenheit. The patient was also tachypneic and tachycardic. The patient had no relieving

or aggravating factors, and the patient's condition was severe. The patient was placed on 2 liters

of O2 at 95%, noted to have rhonchi, and an X-ray showed pneumonia. The patient's labs

showed that the patient's white blood count was 14.7, and ESR was 56. The patient was given

rocephinn and decadron. When vital signs were taken, the patient's vital signs showed that the

patient had a heart rate of 132, blood pressure of 118/81, oxygen saturation of 95 on 2 liters

cannula, respiration 32, and the patient is COVID-negative.

## Primary Diagnosis

**Primary Diagnosis on Admission (2 points):** pneumonia

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

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

      Infection and inflammation of the lung tissue cause pneumonia. Certain pathogens, such

as bacteria, fungi, and viruses, can bypass the first line of defense, such as the mucociliary

defenses of the respiratory tract. In pneumonia, pathogens cross the mucociliary defense of the

respiratory tract causing the activation of the inflammatory reaction. The inflammatory reaction

begins within seconds, and if the innate defense mechanism proves inadequate, this

inflammatory reaction can last for minutes or even days (Capriotti, 2020, p 207). The

inflammatory reaction causes an accumulation of fluid and pus in the lungs and alveoli. The

accumulation of pus in the lungs and alveoli is considered pneumonia. The fluid or pus

accumulating in the lungs' alveoli contains blood elements such as white blood cells and plasma

proteins. According to Freeman & Leigh (2022), on a cellular level, the inflammatory reaction involves lymphocytes, macrophages, neutrophils, CD4, and CD8 cells that cause a cascade of immune product secretion resulting in vascular edema. This accumulation of fluid and pus in the alveoli space and lungs decreases oxygen perfusion and causes cough with mucus. Pneumonia typically affects the respiratory system, but other body systems can be affected if the spread of the infection is not contained within the respiratory system. When the virus spreads through the blood, it causes septic shock. The septic shock caused by an overwhelmed immune system causes low blood pressure and reduced oxygen perfusion to the major body organs. Major organ body systems begin to shut down due to the lack of oxygen perfusion.

Pneumonia presents signs and symptoms related to ventilation and perfusion system disruption. Signs and symptoms of pneumonia include mental confusion, chills, coughing, shortness of breath, chest pain, fatigue, cyanosis, wheezing, fever, nausea, and vomiting. If pneumonia turns septic, patients can present with low blood pressure, pallor, shortness of breath, and diarrhea. Abnormal labs and vital signs are expected in pneumonia. Vital signs of pneumonia show increased respirations, increased heart rate, low blood pressure, low O2 saturation, and a high temperature above normal (Capriotti, 2020, p.475). Laboratory findings associated with pneumonia include blood tests that show elevated white blood count, a text X-ray that shows inflammation of the lungs, pulse oximetry showing decreased oxygen perfusion, and cultures that identify the pathogens.

Diagnostic tests that identify pneumonia include chest X-rays, arterial blood gases, complete blood count panels, respiratory id panels, and cultures such as urine culture, sputum culture, and stool culture (Capriotti, 2020, p.479). Diagnostic tools used to identify pneumonia in this patient were a complete blood count panel, chest X-ray, and cultures. The respiratory id

panel showed the patient was infected with rhinovirus and adenovirus. Treatment for pneumonia

includes drugs and procedures. Treatments for pneumonia are used to treat inflammatory and

infectious processes. Drugs such as bronchodilators reduce bronchospasm and dilate airways to

increase oxygen perfusion, while antibiotics and antivirals treat bacterial respiratory infections

(Capriotti, 2020, p.480). Procedures for relieving pneumonia include suctioning, incentive

spirometer, chest physiotherapy, corticosteroids, nasotracheal suction, percussion, supplemental

oxygen, and nebulizers. This patient was treated with supplemental oxygen, antivirals,

corticosteroids, and nebulizers.

Potential complications associated with pneumonia are acute respiratory failure, sepsis,

cardiovascular collapse, acute respiratory distress syndrome, and concurrent infections. Sepsis is

a complication when an infection in the lungs enters the bloodstream. Sepsis causes multiple

organ failures due to decreased blood pressure and low oxygen perfusion. As mentioned in the

second paragraph, sepsis presents with low blood pressure, pallor, shortness of breath, diarrhea,

mental confusion, and other signs and symptoms of multiple organ failure. Preventative nursing

actions to avoid sepsis are initiating immediate infection treatment with antiviral or antiviral

drugs and practicing good hand hygiene to prevent the further spread of the infection.

Respiratory failure is another complication that can present. Respiratory failure is due to the

pulmonary system's failure to oxygenate blood or eliminate carbon dioxide. Signs and symptoms

of respiratory failure include shortness of breath, extreme fatigue, accessory muscle use,

tachycardia, fever, tachypnea, and cyanosis of the phalanges (Capriotti, 2020, p.477). Preventing

respiratory system infection is the first measure to prevent respiratory failure. Other measures

include hand hygiene, staying compliant with medications prescribed, and implementing

precautions.

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

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and*

*Clinical Perspectives*.

Freeman, A. M., & Leigh, Jr, T. R. (2022). Viral Pneumonia. *In StatPearls. StatPearls*

*Publishing.*

## Active Orders (2 points)

| Order(s) | Comments/Results/Completion |
|---|---|
| **Activity:** No active odor | N/A |
| **Diet/Nutrition:** Regular diet | Regular diet until discontinued. |
| **Frequent Assessments:** Vital signs | Assess every 24 hours and blood pressure every eight hours. |
| **Labs/Diagnostic Tests:** Respiratory ID panel active | Detected rhinovirus and adenovirus. |
| **Treatments:** N/A | No orders on the treatment tab. |
| **Other:** | |
| **New Order(s) for Clinical Day** | |
| Order(s) | Comments/Results/Completion |
| N/A | N/A |
| N/A | N/A |
| N/A | N/A |

**Laboratory Data (15 points)**

**CBC <mark>Highlight All Abnormal Labs</mark>—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** | 3.42-4.80*10^6ul | <mark>5.11ul</mark> | N/A | Elevated red blood cells in this patient are caused by inflammation of the lungs caused by pneumonia (Capriotti, 2020, p.160). |
| **Hgb** | 9.6*12.4g/dl | <mark>13.3g/dl</mark> | N/A | Elevated hemoglobin is caused when the body requires increased oxygen-carrying capacity (Capriotti, 2020, p.273). This patient requires increased oxygen due to pneumonia. |
| **Hct** | 28.6-37.2% | <mark>46.4%</mark> | N/A | The patient's diagnosis of pneumonia causes elevated hematocrit levels. The patient requires increased amounts of oxygen to perfuse the body, so the body produces excessive hematocrit or red blood cells (Capriotti, 2020, p.273). |
| **Platelets** | 244-529*10^3ul | 327ul | N/A | N/A |
| **WBC** | 6.51-13.32ul | <mark>14.7ul</mark> | N/A | An elevated white blood count lab indicates infection (Capriotti, 2020, p.160). The patient has an elevated white blood count due to an Infection of the lungs with rhinovirus and adenovirus. |
| **Neutrophils** | 0.97-5.45*10^3ul | <mark>86.6ul</mark> | N/A | Elevated neutrophils in this patient indicate that the patient is infected |

| | | | | with a foreign pathogen. Excessive neutrophils are produced to fight infections by phagocytosis (Capriotti, 2020, p.160). |
|---|---|---|---|---|
| **Lymphocytes** | 2.45-8.89*10^3ul | 6.1ul | N/A | N/A |
| **Monocytes** | 0.28*1.07*10^3ul | <mark>5.8ul</mark> | N/A | Monocytes are similar to neutrophils; they are produced to fight infections such as viruses, bacteria, fungi, and protozoa (Capriotti, 2020, p.160). Infections of the lungs cause elevated monocytes in this patient in patient. |
| **Eosinophils** | 0.03-0.61*10^3ul | <mark>1.2ul</mark> | N/A | Eosinophils are white blood cells that fight infections (Capriotti, 2020, p.160). Eosinophils are elevated in this patient because of inflammation and infection of the lungs. |
| **Basophils** | 0.01-0.06*10^3ul | <mark>0.3ul</mark> | N/A | Basophils are white blood cells produced to fight infection but can also reduce inflammation (Capriotti, 2020, p.160). Infection and inflammation in the patient's lungs are causing elevated basophils |
| **Bands** | N/A | N/A | N/A | N/A |

Chemistry <mark>Highlight All Abnormal Labs</mark>—**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-** | 136-145mmol/l | 136mmol/l | N/A | N/A |
| **K+** | 3.5-5.1mmol/l | 4.1mmol/l | N/A | N/A |
| **Cl-** | 98-107mmol/l | 104mmol/l | N/A | N/A |
| **Glucose** | 60-99mg/dl | 93mg/dl | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| **BUN** | 7-18mg/dl | 12mg/dl | N/A | N/A |
| **Creatinine** | 0.70-1.30mg/dl | 0.52mg/dl | N/A | N/A |
| **Albumin** | 3.4-5.0g/dl | 4.7g/dl | N/A | N/A |
| **Total Protein** | 6.4-8.2g/dl | <mark>8.7mg/dl</mark> | N/A | High total protein levels indicate dehydration, inflammation, and injury (Capriotti, 2020, p.257). Higher levels in this patient indicate that the patient has inflammation of the lungs and might be dehydrated. |
| **Calcium** | 8.5-10.0mg/dl | <mark>10.2mg/dl</mark> | N/A | Prolonged immobility can cause an elevation in calcium levels (Capriotti, 2020, p.131). Elevated calcium level in the patient is caused by prolonged immobility due to pneumonia causing fatigue. |
| **Bilirubin** | 0.2-1.0mg/dl | 0.5mg/dl | N/A | N/A |
| **Alk Phos** | 54-369u/l | 263ul | N/A | N/A |
| **AST** | 15-37u/l | <mark>52u/l</mark> | N/A | Medications such as analgesics and antibiotics can cause elevated aspartate aminotransferases (Capriotti, 2020, p.1146). High levels are indicated in this patient because the patient is on antibiotic medication and pain medications. |
| **ALT** | 12-78u/l | 37u/l | N/A | N/A |
| **Amylase** | N/A | N/A | N/A | N/A |
| **Lipase** | N/A | N/A | N/A | N/A |

**Other Tests <mark>Highlight All Abnormal Labs</mark>—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** | 0-20mg/dl | 56mg/dl | N/A | N/A |

| CRP | 1.0-3.0mg/dl | 0.48mg/dl | N/A | Elevated CRP is an indication of inflammation (Capriotti, 2020, p.160). Elevated levels in this patient indicates inflammation of the lungs caused by pneumonia. |
|---|---|---|---|---|
| Hgb A1c | 4.5%-5.7% | N/A | N/A | N/A |
| TSH | 1.7-3.0mIU/l | N/A | N/A | N/A |
| Anion gap | 7-18mmol/l | 10mmol/l | N/A | N/A |
| Lactic acid | 0.5-2.2mmol/l | 1.7mmol/l | N/A | N/A |
| Procalcitonin | <0.25ng/ml | 0.06ng/ml | N/A | N/A |

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

| Lab Test | Normal Range | Admission or Prior Value | Today's Value | Reason for Abnormal |
|---|---|---|---|---|
| Color & Clarity | yellow, clear | N/A | N/A | N/A |
| pH | 5.0-9.0 | N/A | N/A | N/A |
| Specific Gravity | 1.003-1.013 | N/A | N/A | N/A |
| Glucose | Negative | N/A | N/A | N/A |
| Protein | Negative | N/A | N/A | N/A |
| Ketones | Negative | N/A | N/A | N/A |
| WBC | 0.0-0.5 | N/A | N/A | N/A |
| RBC | 0.0-3.0 | 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** | Negative | N/A | N/A | N/A |
| **Blood Culture** | Negative | N/A | N/A | N/A |
| **Sputum Culture** | Negative | N/A | N/A | N/A |
| **Stool Culture** | Negative | N/A | N/A | N/A |
| **Respiratory ID Panel** | Negative | Rhinovirus/Adenovirus | N/A | The respiratory ID panel detects when an infection has invaded the body (MedlinePlus, 2023). The respiratory ID panel detected rhinovirus and adenovirus in this patient. |
| **COVID-19 Screen** | Negative | Negative | N/A | N/A |

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

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and*

   *Clinical Perspectives*.

U.S. National Library of Medicine. (n.d.). *Respiratory pathogens panel: Medlineplus medical*

   *test*. MedlinePlus. https://medlineplus.gov/lab-tests/respiratory-pathogens-panel/

**Diagnostic Imaging**

**All Other Diagnostic Tests (5 points):**

Single-view chest x-ray at 12:53 on 03/07/23.

A single was performed to identify the condition of the patient's lungs due to the admitting

diagnosis of pneumonia and the patient's signs and symptoms. The patient presented with fever,

tachypnea, and tachycardia. Identifying the cause of the patients admitting diagnosis allows nurses to form a care plan for the patient.

The patient's x-ray showed that the patient had pulmonary vascular and pneumonic infiltration of the lungs. The patient also had mild left infrahilar opacities.

**Diagnostic Test Correlation (5 points):**

This patient has pneumonia, so a single-view chest x-ray was performed to visualize the condition of the patient's lungs. The X-ray detects cancer, collapsed lungs, lung inflammation, air collecting in plural space, injury, fluid, and exudate buildup (Capriotti, 2020, p.186). This chest X-ray is pertinent to this client because the client has an admitted diagnosis of pneumonia. Pneumonia can cause inflammation, injury, fluid buildup, and exudate buildup in the lungs, impairing oxygen exchange (Capriotti, 2020, p.186). A single-view chest X-ray can also visualize any abnormalities with the heart, such as information and injury.

**Diagnostic Test Reference (1) (APA):**

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and*

*Clinical Perspectives*.

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

| Brand/Generic | | | N/A | N/A | N/A |
|---|---|---|---|---|---|
| | Levalbuterol/Xopenex | Prednisolone/Prelone or delta-cortef | | | |
| Dose | | | N/A | N/A | N/A |
| | 1.25mg | 25mg | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Frequency** | Q4H | BID | | | |
| **Route** | Nebulizer | Oral | N/A | N/A | N/A |
| **Classification** | Pharmacologic class: Beta2agonist Therapeutic class: Bronchodilators | Pharmacological class; Glucocorticoid Therapeutic class; Immunosuppressant | | | |
| **Mechanism of Action** | The medication attaches to beta receptors bronchial cells stimulating the intracellular enzyme cycle to convert adenosine to triphosphate to camp. Because of intracellular enzyme stimulation, bronchial smooth muscles relax and inhibits histamine release from mast cells (Jones, 2020). | This medication binds to intracellular glucocorticoid receptors and suppresses the inflammatory and immune response (Jones, 2020). | N/A | N/A | N/A |
| **Reason Client Taking** | The patient takes medication to relax or vasodilate the airway and clear mucus. | The patient is taking this medication to reduce inflammation in the lungs. | | | |
| **Concentration Available** | 1.25mg | 60 mg | N/A | N/A | N/A |
| **Safe Dose Range Calculation** | 0.63-1.25mg | 5 to 60mg | | | |
| **Maximum 24-hour Dose** | 10mg | 60mg | N/A | N/A | N/A |
| **Contraindications (2)** | Patient with hypersensitivity to levalbuterol. Patients with hypersensitivity to milk protein (Jones, 2020). | any patient with hypersensitivity to Prednisolone or its components. Patients with thrombocytopenic purpura and systemic fungal infections (Jones, 2020). | | | |
| **Side Effects/Adverse Reactions (2)** | Anxiety, chills, hypotension, and arrhythmias | headache, insomnia, adrenal insufficiency, and | N/A | N/A | N/A |

| | | seizures. | | | |
|---|---|---|---|---|---|
| **Nursing Considerations (2)** | Monitor blood pressure and pulse rate before and after nebulizer treatment. Monitor for dyspnea, increased coughing and wheezing, because the drug may stimulate paradoxical bronchospasm (Jones, 2020). | "Give once-daily doses in the morning to mirror bodies normal cortisol secretion" (Jones, 2020). Monitor the patient's intake, output, and daily weight, and assess the patient regularly for evidence of adverse reactions such as heart failure and hypertension (Jones, 2020). | | | |
| **Client Teaching needs (2)** | Instruct caregivers about the common signs and symptoms of the medication chest pain, nervousness, palpitations, rapid heart rate, and tremors (Jones, 2020). Instruct caregivers to stop the medication if paradoxical bronchospasm occurs or the patient's condition worsens (Jones, 2020). | Educate caregivers to give oral Prednisone with food to decrease stomach upset and to take the once-daily dose in the morning (Jones, 2020). Educate caregivers to keep the patient away from people with contagious infections because the drug is an immunosuppressant (Jones, 2020). . Instruct caregivers to notify the provider immediately if the patient is exposed to measles or chickenpox (Jones, 2020). . | N/A | N/A | N/A |

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

Jones, D.W. (2021). *Nurse's drug handbook.* (A. Bartlett, Ed.) (19th ed.). Jones & Bartlett

Learning.

**Assessment**

**Physical Exam (18 points)** <mark>Highlight Abnormal Pertinent Assessment Findings</mark>

| | |
|---|---|
| **GENERAL:**<br>**Alertness:**<br>**Orientation:**<br>**Distress:**<br>**Overall appearance:** | The patient was alert and oriented X4 with no sign of distress. The patient is alert and oriented to person, place, and time. The patient was well-groomed. The patient's hygiene is appropriate for the current situation. |
| **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:** | The patient's skin is dry. The patient skin temperature was warm with elastic skin turgor. No rashes or bruises were present during the patient assessment. <mark>The patient's Braden score is 23.</mark> The patient's skin was appropriate for ethnicity. No wounds or drains are present. |
| **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:** | 18 gauge<br>Peripheral, Right arm<br>03/07/23<br>IV site is patent.<br>No erythema, drainage,<br>Dry and clean<br>Saline lock |
| **HEENT:**<br>**Head/Neck:**<br>**Ears:**<br>**Eyes:**<br>**Nose:**<br>**Teeth:**<br>**Thyroid:** | The patient's head is normal cephalic, and the neck is symmetrical with the trachea at the midline. All pulses are +3. There are no scarring, depressions, or masses. The patient's hair has a normal texture and is evenly distributed. The patient's eyes are symmetrical, with no sign of exudates or hemorrhage. The eyes are perrla, and extraocular movements are intact. The eyes have no sign of nystagmus. The ears are symmetrical with no sign of discharge and no tenderness. That tympanic membrane is normal in appearance, and |

| | |
|---|---|
| | hearing is intact. The nasal mucosa is pink and moist. The nasal septum is midline, and the nares are patent bilaterally. The patient's oral mucosa is pink and moist. |
| **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 ☒**<br>**Edema Y ☐    N ☒**<br>**Location of Edema:** | The patient presented with s1 and s2 heart sounds. Peripheral pulses were +3 in both the upper and lower extremities. The patient capillary refill was less than 2. The patient had no neck vein distention. The patient is not a fall risk; the fall score was 0. No edema. |
| **RESPIRATORY:**<br>**Accessory muscle use:    Y☐     N ☒**<br>**Breath Sounds: Location, character** | Breath sounds are clear bilateral. Respirations are regular. Regular breathing pattern. Breath sounds normal with slight wheezing anteriorly and posteriorly. Respirations 28 per min. No muscle accessory use. |
| **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:** | Regular home diet.<br>Regular diet.<br>115 cm<br>Active bowel sounds in all four quadrants.<br>Yesterday<br>No palpations patient had surgery.<br><br>No distention of the abdomen<br>No incisions present.<br>No scars are present.<br>No drains are present.<br>No wounds are present.<br>No Ostomy.<br>No Nasogastric tube in place.<br>No feeding tube was 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 ☒** | Yellow<br>Clear, no sedimentations<br>1x void<br>The patient stated no pain with urination.<br>No dialysis<br>No catheter |

| | |
|---|---|
| **Type:**<br>    **Size:** | N/A<br>N/A |
| **MUSCULOSKELETAL:**<br>**Neurovascular status:**<br>**ROM:**<br>**Supportive devices:**<br>**Strength:**<br>**ADL Assistance:  Y☐  N ☒**<br>**Fall Risk:    Y ☐  N☒**<br>**Fall Score:**<br>**Activity/Mobility Status:**<br>**Independent (up ad lib)** ☐<br>**Needs assistance with equipment** ☐<br>**Needs support to stand and walk** ☐ | Neurovascular status is intact.<br>The patient has full range of motion in the lower and upper extremities. Active and passive range of motion<br>The patient does not need supportive devices.<br>The patient has +5 strength in the upper extremities and lower extremities.<br>The patient does not need any ADL assistance.<br>==The patient's morse fall score is 20, indicating low fall risk.==<br>The patient is active and does not need equipment or assistance with equipment.<br>The patient can stand and walk without assistance. |
| **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 oriented to person, place, situation, and time.<br>The patient's pupils are equal, reactive to light, and accommodated.<br>The patient has 5+ strengths in the lower and upper extremities.<br>The patient can follow commands, and the patient's memory is intact. and speech was soft and clear. The patient is awake and answering questions appropriately.<br>Alert and oriented times 4.<br>Sensory is intact. |
| **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's caregivers indicated that the patient is coping with his current condition by playing little video games on his tablet and watching TV.<br>The mother stated they do not need any help with transportation, food, medication assistance, or home equipment.<br>The mother stated that her husband has a vehicle they used to come to the hospital, and they have medical insurance. She also said they do not need food and equipment because they can afford them. |

|  | The patient lives with his mother and father at home. They do not have any pets. He is an only child. The mother mentioned that her grandma lives nearby, so she can support them if needed. |
|---|---|

**Vital Signs, 2 sets – (2.5 points) <mark>Highlight All Abnormal Vital Signs</mark>**

| Time | Pulse | B/P | Resp Rate | Temp | Oxygen |
|---|---|---|---|---|---|
| **8:45** | <mark>115</mark> | 115/78 | <mark>28</mark> | 98.3 oral | <mark>93 on 2L</mark> |
| **11:25** | <mark>114</mark> | N/A | <mark>30</mark> | 98.4 oral | 95 on room air |

**Vital Sign Trends:**

Vital signs collected at 8:45 am show that the patient's heart rate, respiratory rate, and oxygen are all abnormal. The patient has an abnormal respiratory rate, and the patient's pneumonia diagnosis explains the oxygen rate decline. The patient had excessive mucus secretion, making breathing in oxygen difficult. Because the body has to work hard to breathe in oxygen, the patient's respiratory and heart rates increase. Vital signs taken at 11:25 show that the patient's heart rate conspiratory rate is still abnormal. The patient's oxygen has improved significantly because the patient received albuterol, which cleared the airways. The abnormal heart and respiratory rates are most likely caused by the patient running around in his room and his condition.

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

| Pulse Rate | 60 to 110 |
|---|---|
| **Blood Pressure** | 106/55 |
| **Respiratory Rate** | 20 to 25/min |

| Temperature | 98.2F |
|---|---|
| Oxygen Saturation | 95% to 100% |

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

Holman, H. C., Williams, D., Sommer, S., Johnson, J., Wheless, L., Wilford, K., & McMichael,

      M. G. (2019). *RN nursing care of children review module* (11th ed.). Assessment

      Technologies Institute, LLC.

## Pain Assessment, 2 sets (2 points)

| Time | Scale | Location | Severity | Characteristics | Interventions |
|---|---|---|---|---|---|
| 8:45 | Wong-baker faces pain rating scale. | Upper chest | 2 hurts little bit. | Achy sore-like pain. | None |
| **Evaluation of pain status *after* intervention** | Wong-baker faces pain rating scale. | N/A | N/A | N/A | N/A |
| **Precipitating factors:** Administration of albuterol.<br>**Physiological/behavioral signs:** The patient shows no physiological or behavioral signs indicating pain. The patient did state his is a two on the faces scale when asked. | | | | | |

## Intake and Output (1 points)

| Intake (in mL) | Output (in mL) |
|---|---|
| 125 ml of water, 250ml of juice | 1x void urine |

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

**Age Appropriate Growth & Development Milestones**

1.  Preschoolers, on average, sleep about 12 hours a day and infrequently take daytime naps.

    Preschoolers also experience sleep disturbances frequently during childhood, and they

    may experience difficulty going to sleep and night terrors(Holman et al., 2019, p.25).

2.  According to Holman et al. (2019, p.25), the deciduous or primary teeth eruption is

    finalized during the early preschool years.

**3.**  Preschoolers can speak more than 21,000 words by the end of the fifth year and speak

    using four to five words at four to five years old (Holman et al., 2019, p.25)**.**

**Age Appropriate Diversional Activities**

1.  Painting

2.  Playing electronic games

3.  Playing pretend and dress-up activities

**Psychosocial Development:**

**Which of Erikson's stages does this child fit?** This child fits in the initiative versus

guilt stage of Erikson's theory (Holman et al., 2019, p.25). Preschoolers can experience guilt

when they believe they have misbehaved or cannot accomplish a task. They can also experience

initiative when parents or teachers guide them to attempt new activities within their capabilities.

**What behaviors would you expect?** Preschoolers in this stage are more energetic and

willing to learn even if they do not have the physical ability to succeed (Holman et al., 2019,

p.25).

**What did you observe**? I did observe that the child was very energetic even with his

sickness. The child was very communicative during the entire head-to-toe assessment. He

participated in helping with the head-to-toe assessment by asking what needed to be done next

and maneuvering to allow for a proper head-to-toe assessment.

**Cognitive Development:**

      **Which stage does this child fit, using Piaget as a reference?** This child fits in the preoperational stage of Piaget's theory (Holman et al., 2019, p.25). During this stage, the child transitions from preconceptual thoughts to intuitive thoughts around the age of four but will remain in the intuitive thought until the age of seven (Holman et al., 2019, p.25).

      **What behaviors would you expect?** According to Holman et al. (2019, p.25), children around this age do not exhibit stranger anxiety; they can tolerate changes in daily routine but can develop imaginary fears; prolonged separation can provoke anxiety; favorite toys and appropriate play should be used to help with fears, and pretend play is healthy because it allows preschoolers to determine the difference between reality and fantasy. Children around this age shift from parallel play to associative play during the preschool years; preschool children usually play with a ball, ride tricycles, paint, role-play, and play electronic games (Holman et al., 2019, p.25).

      **What did you observe?** During my clinical, I noticed that the patient did not exhibit stranger anxiety. When the patient's mother and father went downstairs to the car, the patient was OK with the health care team coming in and out of the room. The patient even allowed me to take his temperature and vital signs without the parents in the room. I also noticed that the patient had his favorite toys in the room and was engaging in fantasy play with his little car.

**Vocalization/Vocabulary:**

Preschoolers have more than 21,000 words by the end of 5th grade, they can speak using four to five words at the age of four to five, and they enjoy talking because language becomes a primary method of communication for them (Holman et al., 2019, p.25). This Patient can speak more than 21,000 words and uses more than four to five words per sentence. The patient enjoys

communicating with his mother, father, and healthcare team. The patient's vocalization is clear

and understandable.

**Development expected for the child's age and any concerns?**

This patient is on track for development and growth of age. There are no concerns

concerning growth and development.

**Any concerns regarding growth and development?** There are no concerns regarding the

patient's growth and developmental milestones. This patient is on track for growth and

developmental milestones. He has no vocabulary delay or behavioral issues.

**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

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**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. Airway clearance is related to increasing secretions, as evidenced by infection (Phelps, L. 2020). | The patient presented with excessive mucus. | 1. Assess respiratory status at least every 4 hours or according to established standards (Phelps, L. 2020).<br><br>2. Give expectorants, bronchodilators, and other drugs, as ordered, and monitor effectiveness (Phelps, L. 2020). | 2. Patient doesn't experience dyspnea or a decline in respiratory status after every 4 hours (Phelps, L. 2020).<br><br>3. Patient's airway will clear up within 10 minutes and remain clear and allow for adequate ventilation. | The patient is satisfied with the interventions placed. The patient's airway remains clear of excessive secretion and can breathe easily. |
| 4. Ineffective breathing pattern related to | The patient has an abnormally high | **1.** Assess the patient's breath sounds and vital signs every four | **1.** The patient's respiratory rate continues to improve after every | The patient's breathing pattern improves with |

| | | | | |
|---|---|---|---|---|
| disease process as evidenced by tachypneic & wheezing. | respiratory rate. | hours.<br><br>**2.** Teach and monitor deep breathing, coughing, and use of incentive spirometer. Maintain regimen every 4 hours. | four hours of assessment.<br><br><br>**2.** The patient's airway will clear, the lungs will expand, and prevent respiratory complications after using. | normal respiratory rate, depth, and oxygen saturation. |
| 5. Acute pain related to disease process as evidenced by patient's verbal confirmation of pain (Phelps, L. 2020). | The patient verbalized having pain using a face pain scale. The patient stated his pain is a 2 on the face pain scale. | 1. "Assess patient's signs and symptoms of pain to be able to administer pain medication as prescribed. Monitor and record the medications effectiveness and adverse effects" (Phelps, L. 2020).<br>2. Plan activities with the patient to provide distractions, such as reading, crafts, television, and video games | 6. The patient reports achieving pain relief with analgesia or other measures 50 minutes after implemented (Phelps, L. 2020).<br>7. The patient is focused on non-pain-related matters, and will begin feeling comfortable 10 minutes after implemented (Phelps, L. 2020). | The patient verbalizes relief from pain and uses a face scale for pain. Caregivers are satisfied with the interventions implemented. |

| | | (Phelps, L. 2020). | | |
|---|---|---|---|---|
| 8. Knowledge deficiency related to lack of exposure as evidenced by a request for more informatio n (Phelps, L. 2020). | The patient's parents were requesting information from the student and nurse. | **1.** Emphasize the necessity for continuing antibiotic therapy for a prescribed period (Phelps, L. 2020). **2.** Provide caregivers with written information and verbal information about the disease process and signs and symptoms (Phelps, L. 2020). | **1.** Caregivers will verbalize understanding of the importance of continuing antibiotic therapy for the prescribed period after being educated(Phelps, L. 2020). **2.** Caregivers will verbalize understanding of written and verbal information provided after reading the information(Phelps , L. 2020). | Caregivers can identify signs and symptoms and understand the need to finish antibiotics. |

**Other References (APA):**

Phelps, L. L. (2020). *Sparks & Taylor's Nursing Diagnosis Reference Manual* (11th ed.).

Wolters Kluwer.

**Concept Map (20 Points):**

**Subjective Data**

The patient stated, "I have pain when breathing; it doesn't hurt that bad". "It is a two on the pain faces scale."
The patient also stated "I am feeling much better than yesterday"

**Objective Data**

Single-view chest x-ray at 12:53 on 03/7/23. Chest x-ray shows pneumonic infiltrate.
Vital signs: respiratory rate of 38.
Elevated respiratory rate.
Labs: respiratory id panel discovered patient is infected with rhinovirus and adenovirus.
White blood counts are elevated, indicating infection. CRP elevation indicates inflammation.

**Client Information**

A 6-year-old African American male was admitted for pneumonia. The patient is alert and oriented times 4. The patient is 25.8 kg with a BMI of 16.16 and is full code. The patient has no past surgical or birth history. The patient has one past medical history of polydactyly.

**Nursing Diagnosis/Outcomes**

A.  Airway clearance is related to increasing secretions, as evidenced by infection (Phelps, L. 2020).

i.  Patient doesn't experience dyspnea or a decline in respiratory status after every 4 hours (Phelps, L. 2020).
Patient's airway will clean up within 10 minutes and remain clear and allow for adequate ventilation.

B.  Ineffective breathing pattern related to disease process as evidenced by tachypneic & wheezing.

i.  The patient's respiratory status will stabilize every four hours of assessment.
ii.  The patient's airway will clear, the lungs will expand, and prevent respiratory complications after use.

C.  Acute pain related to disease process as evidenced by patient's verbal confirmation of pain (Phelps, L. 2020).

i.  The patient reports achieving pain relief with analgesia or other measures 50 minutes after implementation (Phelps, L. 2020).
ii.  The patient is focused on non-pain-related matters such as watching TV 10 minutes after implementation (Phelps, L. 2020).

D.  Knowledge deficiency related to lack of exposure as evidenced by requests for more information (Phelps, L. 2020).

i.  Caregivers will verbalize understanding of the importance of continuing antibiotic therapy for the prescribed period after being educated (Phelps, L. 2020).
ii.  Caregivers will verbalize understanding of written and verbal information provided after reading the information (Phelps, L. 2020).

**Nursing Interventions**

1. Assess respiratory status at least every 4 hours or according to established standards (Phelps, L. 2020)

2. Give expectorants, bronchodilators, and other drugs, as ordered, and monitor effectiveness (Phelps, L. 2020).

1. Assess the patient's breath sounds and vital signs every four hours.

2. Teach and monitor deep breathing, coughing, and use of incentive spirometer. Maintain regimen every 4 hours.

1.  "Assess patient's signs and symptoms of pain to be able to administer pain medication as prescribed. Monitor and record the medications effectiveness and adverse effects" (Phelps, L. 2020).

2.  Plan activities with the patient to provide distractions, such as reading, crafts, television, and video games (Phelps, L. 2020).

1.  Emphasize the need for continuing antibiotic therapy for a prescribed period (Phelps, L. 2020).

2.  Provide caregivers with written information and verbal information about the disease process and signs and symptoms (Phelps, L. 2020).