

N433 Care Plan # 1

Lakeview College of Nursing

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June 25, 2022

Demographics (3 points)

Date of Admission 06/10/2022	Client Initials K.M.	Age (in years & months) 4 months	Gender Male
Code Status Full Code	Weight (in kg) 5.68 kg	BMI N/A for age	Allergies/Sensitivities (include reactions) NKA

Medical History (5 Points)

Past Medical History: Premature at 34-week gestation (01/29/2022), NICU feed and grow for 2 weeks and discharge, right inguinal hernia repair (04/15/2022), circumcision (04/15/2022)

Illnesses: hypercapnia (06/10/2022), reactive airway disease (06/18/2022), acute bronchiolitis (06/12/22), acute respiratory failure with unspecified hypoxia or hypercapnia (06/10/2022), rhinovirus (06/10/2022), parainfluenza (06/10/2022), viral reactive hepatitis (06/18/2022), enlarged liver (06/18/2022)

Hospitalizations: Premature at 34-week gestation (01/29/2022), NICU feed and grow for 2 weeks and discharge, right inguinal hernia repair (04/15/2022), circumcision (04/15/2022), hypercapnia (06/10/2022), reactive airway disease (06/18/2022), acute bronchiolitis (06/12/22), acute respiratory failure with unspecified hypoxia or hypercapnia (06/10/2022), rhinovirus (06/10/2022), parainfluenza (06/10/2022), viral reactive hepatitis (06/18/2022), enlarged liver (06/18/2022)

Past Surgical History: Right Inguinal hernia repair (04/15/2022), Circumcision (04/15/2022)

Immunizations:

Pediarix (DTAP/IPV/HEP B)- 03/29/2022, 06/06/2022

Engerix 0.5 mL-Hep B-02/14/2022

PRP OMP/Pedvax HIB-03/29/2022, 06/06/2022

Pneumococcal conjugate-13 Prevnar 13-06/06/2022, 03/29/2022

Rotavirus (Rotarix) 03/29/2022, 06/06/2022

Birth History: Born 01/29/2022 at 34 weeks gestation. Twin. Spent 2 weeks in NICU for feed and growth discharged 2 weeks following birth at 36 weeks/ 2 weeks old.

Complications (if any): premature at 34 weeks gestation, feed and growth in NICU 2 weeks post-delivery.

Assistive Devices: n/a

Living Situation: Lives at home with parents (mom and dad) and brother(twin).

Admission Assessment

Chief Complaint (2 points): - Parents brought child in with complaints of runny nose, post-tussive emesis, cough diagnosis after admission. Acute Respiratory Failure, unspecified hypoxia, or hypercapnia (06/10/2022), secondary to rhinovirus and parainfluenza (06/10/2022)

Other Co-Existing Conditions (if any): Acute bronchiolitis 06/10/2022, Parainfluenza virus infection (06/10/2022), Rhinovirus infection 06/10/2022), viral reactive hepatitis (06/18/2022), enlarged liver (06/18/2022)

Pertinent Events during this admission/hospitalization (1 points): Patient visited convenient care and referred to ED at Carle, Urbana, Illinois and admitted to pediatric care unit. NG tube placement (06/18/2022) Alimentum feeding verified via XR KUB for

placement, NG tube removed via emesis 06/21/2022- not reinserted. NPO- gastro rest, Nebulizer Albuterol every 4 hr., RAM nasal cannula (3L, 25%), XR KUB (06/21/2022), indicated mild gastric distention.

History of present Illness (OLD CARTS) (10 points): 18-week African American male born 34-week gestation, twin, in hospital 2 weeks feed and grow presented with symptoms 4 days post 4-month vaccinations (06/06/2022). Complains of fever, nasal congestion and cough unrelieved by OTC treatment. Presented with Fever, nasal congestion, cough with post-tussive emesis and subcostal retraction. Parents took infant to convenient care and was then taken directly to emergency room for evaluation. Patient received 8L/40% oxygen then 12L/60% oxygen, epinephrine 2X, Pulmicort x1, and dexamethasone x1. Respiratory culture indicated positive for rhinovirus and parainfluenza virus. Patient lungs sounds wheeze and crackle with subcostal retraction, patient admitted to pediatric care unit at Carle hospital in Urbana, Illinois. NG tube inserted and verified via XKUB, patient being monitored and treated for acute respiratory failure secondary to rhinovirus and parainfluenza virus. Treatment of Nebulized albuterol every 4 hours and feeding via NG tube.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Acute Hypoxic Respiratory Failure 06/10/2022

Secondary Diagnosis (if applicable): Rhinovirus and Parainfluenza Virus (06/10/2022)

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

Bronchiolitis/Bronchitis

A typical lower respiratory tract disorder is known as bronchitis, inflammation of the bronchial tree, or bronchiolitis-inflammation of the bronchioles (Capriotti, 2020). Infection of the lower respiratory tract can impair the gas exchange of oxygen and CO₂, causing hypoxia or hypercapnic responses (Capriotti, 2020). Respiratory viruses cause inflammation and can be either bacterial or viral infections. The common cause of bronchiolitis is parainfluenza virus, influenza a and b, coronavirus, and respiratory syncytial virus (Capriotti, 2020).

In acute infections, an inflammatory response from the pathogen occurs (Capriotti, 2020). Mucous membranes become fluid-filled, decreasing mucociliary function and increasing mucus as air passages become obstructed (Capriotti, 2020). The disrupted mucous movement triggers a cough to clear the secretions from the chest, which can lead to pleuritic chest pain, fever, general weakness, and fatigue (Capriotti, 2020). Some of the clinical presentations of the illness can be sore throat, swollen lymph nodes, and rhinorrhea, with rhonchi or wheeze lung sounds that can be heard in most lung fields (Mayo Clinic, 2020). Coughing may help clear the lung sounds, but stridor may be present due to mucus left behind in the bronchial tree and trachea (Capriotti, 2020). An increased temperature, elevated respiration, and decreased pulse may be present during infection (Capriotti, 2020).

Diagnosis is typically through evaluating symptoms or respiratory cultures (Capriotti, 2020). Lab tests such as a CBC can rule out whether it is a viral or bacterial infection (Capriotti, 2020). Pneumonia is ruled out via chest x-ray (Capriotti, 2020). Once identified, a broad-spectrum antibiotic is used to treat bacterial infections, but no antibiotic

is prescribed for viral infections (Capriotti, 2020). Nebulizing albuterol may be prescribed to open the airways while preventing bronchospasms (Capriotti, 2020). Antitussives may be prescribed as a cough suppressant (Capriotti, 2020).

The patient had a respiratory panel performed that indicated parainfluenza virus and rhinovirus. An antibiotic was not prescribed as both were viral infections that caused bronchiolitis. The patient was given a nebulizing albuterol treatment every 4 hours. Oxygen status was maintained with a RAM nasal cannula and suctioning to remove excess nasal and mucosal secretions. The patient is being watched for potential complications such as hypoxia and pneumonia. Vitals were performed every hour, including continuous O2 Sat, pulse, RR, and O2 titration to maintain oxygen saturation. Preventative nursing measures were suctioning, hooked up to a continuous O2 monitor/alarm, placed the patient in an elevated position in the crib. Lung assessments were monitored every shift for change. Increased vital monitoring every hour was also a preventative measure.

Pathophysiology References (2) (APA):

Capriotti, T. (2020) *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives Second Edition*. Philadelphia, PA: F.A. DAVIS

Mayo Clinic. (2020, Jan 15). *Bronchiolitis*.

<https://www.mayoclinic.org/diseases-conditions/bronchiolitis/symptoms-causes/syc-20351565>

Active Orders (2 points)

Order(s)	Comments/Results/Completion
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Activity:	Elevate HOB/ As tolerated
Diet/Nutrition:	NPO
Frequent Assessments:	O2, Respiratory assessment, vitals- Pulse, O2, RR hourly.
Labs/Diagnostic Tests:	CMP, CRP, CBC W/Diff- completed
Treatments:	Suction, Brief desaturation 20 seconds or less while sleeping. Nebulizer every 4 hr. PRN. RAM nasal cannula (3L, 25%)
Other:	n/a
New Order(s) for Clinical Day	
Order(s)	Comments/Results/Completion
Consult Pediatric General Surgery	NG tube placement KUB- possible pneumatosis- pediatric surgery consulted

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	Admission	Today's	Reason for Abnormal Value
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	Range (specific to the age of the child)	or Prior Value	Value	
RBC	3.43-4.80	4.39	3.84	wdl
Hgb	9.6-12.4	10.5	9.0	Low- Patient has respiratory infection, rhino virus and parainfluenza virus, which will reflect as a decrease in HgB count (Pagana et al., 2021).
Hct	28.6-37.2	33.8	29.2	wdl
Platelets	244-529	478	801	High- Patient has respiratory infection and parainfluenza virus, which will reflect as an increase in platelet count (Pagana et al., 2021).
WBC	6.51-13.32	13.12	20.57	High-Patient has respiratory infection, rhinovirus and parainfluenza virus, which will reflect as an increase in WBC count (Pagana et al., 2021).
Neutrophils	0.97-5.45	6.66	8.88	High- Patient has respiratory infection, rhinovirus and parainfluenza virus, which will reflect as an increase in neutrophil count (Pagana et al., 2021).
Lymphocytes	2.45-8.89	4.71	8.68	wdl
Monocytes	0.28-1.07	1.32	2.60	High- Patient has respiratory infection, rhinovirus and parainfluenza virus, which will reflect as an increase in monocyte count (Pagana et al., 2021)
Eosinophils	0.03-0.61	0.36	0.28	wdl
Basophils	0.01-0.06	0.02	0.04	wdl
Bands	0.00-0.06	0.05	0.09	High- Patient has respiratory infection, rhinovirus and parainfluenza virus, which will reflect as an increase in bands (Pagana et al., 2021)

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 Mmol/l	138	138	wdl
K+	3.5-5.1 Mmol/l	5.0	5.3	High- Patient has post tussive- emesis which could result in increased K+ levels from dehydration, currently NPO. Infection can cause increased potassium levels as well. (Pagana et al., 2021).
Cl-	98-107 mmol/l	104	106	wdl
Glucose	74-100 mg/dl	89	79	wdl
BUN	5-17 mg/dl	10	6	wdl
Creatinine	0.55-1.30 mg/dl	0.38	0.33	Low- Decreased values due to dehydration from post-tussive emesis (Pagana et al., 2021).
Albumin	3.8-5.4 g/dl	3.8	3.5	Low-Decreased value due to dehydration from post-tussive emesis (Pagana et al., 2021).
Total Protein	4.4-7.6 g/dl	7.1	6.9	wdl
Calcium	9.0-11.0 mg/dl	10.7	10.7	wdl
Bilirubin	0.2-1.2 mg/dl	0.5	0.2	wdl
Alk Phos	9-500 u/l	516	273	High-Patient has hepatitis which would result in elevated count (Pagana et al., 2021).
AST	5-34 u/l	292	28	High- Patient had hepatitis which would result in elevated count (Pagana et al., 2021).
ALT	0-55 u/l	441	25	High-Patient had hepatitis which would result in elevated count (Pagana et al., 2021).
Amylase	1-17 u/l	n/a	n/a	*test not performed (Mayo Clinic, n.d.).

Lipase	13-60 u/l	n/a	n/a	*test not performed (Mayo Clinic, n.d.)
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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	3-13 mm/hr	n/a	n/a	Test not ordered
CRP	0.00-0.50	n/a	0.37	wdl
Hgb A1c	100-200/ less than 8.5%, but over 7.5%	n/a	n/a	Test not ordered
TSH	0.7-8.4 mIU/L	n/a	n/a	Test not performed (Mayo Clinic, n.d.)

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	Test not ordered
pH	5.0-7.0	n/a	n/a	Test not ordered
Specific Gravity	1.010-1.025	n/a	n/a	Test not ordered
Glucose	neg	n/a	n/a	Test not ordered
Protein	neg	n/a	n/a	Test not ordered
Ketones	neg	n/a	n/a	Test not ordered
WBC	0-25/ul	n/a	n/a	Test not ordered
RBC	0-20/ul	n/a	n/a	Test not ordered
Leukoesterase	neg	n/a	n/a	Test not ordered

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

Test	Normal Range	Admission or Prior Value	Today's Value	Explanation of Findings
Urine Culture	neg	n/a	n/a	n/a
Blood Culture	neg	n/a	n/a	n/a
Sputum Culture	neg	n/a	n/a	n/a
Stool Culture	neg	n/a	n/a	n/a
Respiratory ID Panel	neg	Positive 06/10/2022	n/a	Positive for parainfluenza virus and rhinovirus/enterovirus
COVID-19 Screen	neg	neg	n/a	n/a

Lab Correlations Reference (1) (APA):

Pagana, K.D., Pagana, T.J., & Pagana, T.N. (2021). *Mosby's Diagnostic and Laboratory Test Reference, fifteenth edition*. St. Louis, MO: Elsevier

Mayo Clinic Laboratories. (n.d.). *Pediatric Test Reference Values*.

<https://www.mayocliniclabs.com/test-info/pediatric/refvalues/reference.php>

Diagnostic Imaging

All Other Diagnostic Tests (5 points): XKUB (06/18/2022)

Diagnostic Test Correlation (5 points): A Kub x-ray can be used to explore the abdomen, kidney, ureter, and bladder systems (Capriotti, 2020). When patients present with issues of distention or pain, the KUB is used to explore the structures of the urinary and GI systems

(Capriotti, 2020). X-rays utilize electromagnetic energy to create images on film (Capriotti, 2020). The energy or rays pass through the body on plates, creating images of internal structures (Capriotti, 2020). The KUB x-ray was used to identify mild gastric distention, and the heart was not enlarged. Areas of mild peribronchial thickening and pneumatosis were identified on the film. Pyloric stenosis was probable and enlarged liver was also visualized. The findings were reported, and a surgical consult was scheduled on 06/22/22. The client had emesis, ejected the feeding tube, and had abdominal distention. The physician placed the infant on gut rest. The patient is currently receiving an IV D5 solution and provided with simethicone every 6hr. as needed to relieve symptoms of gas.

Diagnostic Test Reference (1) (APA):

Capriotti, T. (2020) *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives Second Edition*. Philadelphia, PA: F.A. DAVIS

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

Brand/Generic	Albuterol sulfate/ Accuneb	Simethicone/Gas-X	n/a	n/a	n/a
Dose	2.5 mg=3 mL	0.3 mL=20 mg of 40 mg/0.6mL	n/a	n/a	n/a
Frequency	RT every 4 hrs-	6 hr. PRN	n/a	n/a	n/a
Route	nebulization	Oral/gastric tube (now removed)	n/a	n/a	n/a
Classification	Beta-adrenergic agent/beta 2 agonist	Anti-flatulent/ polydimethylsiloxanes	n/a	n/a	n/a
Mechanism of		Changes surface tension of the	n/a	n/a	n/a

Action	Stimulates smooth muscle receptors to relax tracheal muscles and relieves bronchospasms.	gas bubble preventing pockets which are quickly eliminated by flatus, belching, or absorption back into the bloodstream (Prescribers Digital reference, 2022)			
Reason Client Taking	Wheeze/cough	Gas and abdominal discomfort	n/a	n/a	n/a
Concentration Available	2.5 mg=3mL	0.3 mL=20 mg of 40 mg/0.6mL	n/a	n/a	n/a
Safe Dose Range Calculation	2.5 mg via nebulizer every 20 minutes for the first hour for acute exacerbation. Reevaluate after.	20 mg PO per dose after meals or at bedtime as needed.	n/a	n/a	n/a
Maximum 24-hour Dose	Not indicated	240mg/day (12 doses)	n/a	n/a	n/a
Contraindications (2)	Contraindicated use with other beta-adrenergic blockers and acetaminophen.	Contraindicated for those with simethicone sensitivity. Do not use in patients with phenylketonuria as some sources of simethicone may contain aspartame. (Prescribers digital reference, 2022)	n/a	n/a	n/a
Side Effects/Adverse Reactions (2)	Mild- tremors Severe- arrhythmia, bronchospasms	Eructation(belching) and flatulence	n/a	n/a	n/a
Nursing Considerations (2)	Assess lung sounds Assess vitals prior to administering albuterol	No adjustment needed for hepatic impairment No adjustment needed for renal impairment	n/a	n/a	n/a
Client Teaching needs (2)	Inform parents that nebulizer is short acting inhaler/treatment and bronchodilator. Teach parents of importance of	Protect from light Store away from heat and do not refrigerate.	n/a	n/a	n/a

	<p>understanding risk factors to asthma and proper administration methods to prevent respiratory complications.</p>				
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Medication Reference (1) (APA):

Prescribers Digital Reference (2022, June 25). *Albuterol drug summary*.
<https://www.pdr.net/drug-summary/Albuterol-Sulfate-Inhalation-Solution-0-083-albuterol-sulfate-1427#4>

Prescribers Digital Reference (2022, June 25). *Simethicone drug summary*.
<https://www.pdr.net/drug-summary/Gas-X-simethicone-2675>

Assessment

Physical Exam (18 points) Highlight Abnormal Pertinent Assessment Findings

<p>GENERAL: Alertness: wdl Orientation:wdl Distress: subcostal muscle use upon respiration Overall appearance: abdominal distention</p>	<p>Alert and responsive to touch. Orientation within desired limits, distress only when coughing, relieved by suction and reposition. Use of subcostal muscles and abdominal distention.</p>
<p>INTEGUMENTARY: Skin color: wdl Character: dry Temperature: warm Turgor: firm Rashes: no rashes Bruises: no bruises Wounds: no wounds Braden Score: 8 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: no drains</p>	<p>Skin brown (wdl), dry, warm, firm, no rashes, bruises, wounds. Score of an 8 on Braden score. No drains present. IV placement on left lower arm, 06/22/22, 24G patent with no signs of redness, drainage. Dressing dry and intact. IV running d5 at 22mL/Hr.</p>

<p>IV Assessment (If applicable to child): Size of IV: 24G Location of IV: left Date on IV: 06/22/22 Patency of IV: wdl Signs of erythema, drainage, etc.: no, wdl IV dressing assessment: intact and dry IV Fluid Rate or Saline Lock: D5 22mL/hr</p>	
<p>HEENT: pink mucosa, with thick white mucous, requires intermittent suctioning. Head/Neck: wdl Ears: wdl Eyes: crusty eyelids bilaterally. Perla-follows objects in room and brisk response to movement. Nose: RAM nasal cannula, required suction of secretions. Teeth: no teeth Thyroid:non-palpable</p>	<p>Pink mucosa with thick white mucous, requires intermittent suctioning. Head/neck wdl, ears, wdl, eyes crusty eyelids bilaterally. PERLA- follows objects in room and brisk response to movement. Nose, RAM nasal cannula, required suction of secretions. No teeth, thyroid non-palpable.</p>
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Regular rate and rhythm, no murmur Cardiac rhythm (if applicable): Peripheral Pulses: 2+ all points Capillary refill: less that 3 seconds Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema: none</p>	<p>RRR, no murmur, peripheral pulses 2+ all points, capillary refill brisk, less than 3 seconds. No JVD, no edema</p>
<p>RESPIRATORY: Accessory muscle use: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Breath Sounds: Location, character Subcostal retraction</p>	<p>Tachypneic, o2 RAM nasal cannula @ 3L/25%. Subcostal retraction, wheeze and cough, fine crackle right and left lower quads, wheeze heard in left and right upper quads</p>
<p>GASTROINTESTINAL: Diet at home: formula Current diet: NPO Height (in cm): 60cm Auscultation Bowel sounds: active all 4 quads Last BM: 06/22/22 Palpation: Pain, Mass etc.: Inspection: distention</p>	<p>NPO by mouth, abdominal distention. No pain. Last bowel movement 06/22/22. No wounds. Bowel sounds active all 4 quads.</p>

<p>Distention:yes Incisions:no Scars:no Drains: no Wounds: no Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	
<p>GENITOURINARY: Color: yellow/straw Character: Quantity of urine: 105G Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: wdl Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Urine yellow/straw, 105G urine, wdl genitals, no catheter.</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: full ROM Supportive devices: none Strength: equal all 4 ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> patient is 4 months old Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: 2 low risk Activity/Mobility Status: with assistance / age appropriate. Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>Patient is 4 months old. Full ROM present in arms and legs. No supportive devices required. Strength equal. ADL assistance yes as patient is 4 months old. Fall risk 2 low risk. Activity with assistance can move WDL, age appropriate.</p>
<p>NEUROLOGICAL: glasgow 15 MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input checked="" type="checkbox"/> Orientation:wdl Mental Status:wdl Speech: coo and crys Sensory: wdl LOC: alert and responsive</p>	<p>Left arm in IV sling, but strength equal. Orientation WDL, mental status, WDL, speech coos and cries. Perla- eyes follow objects and movements in room- equal and reactive</p>
<p>PSYCHOSOCIAL/CULTURAL:</p>	<p>Patient not yet discharged, and discharge has</p>

<p>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):</p>	<p>not yet been discussed. Patient lives at home with parents and sibling (twin)</p>
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Vital Signs, 2 sets – (2.5 points) Highlight All Abnormal Vital Signs

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1130	140	125/57	56	98.1 axillary	94
1600	147	n/a	60	97.8 axillary	92

Vital Sign Trends: Pulse steady but increased. B/P not taken again n/a. Respiration elevated, but stable. Oxygen decreased but above 90%. Patient overall stable, but further monitoring should be continued.

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

Pulse Rate	100-190 awake, 90-160 asleep (Novak & Gill, 2018)
Blood Pressure	72-104 systolic and 37-56 diastolic (Novak & Gill, 2018)
Respiratory Rate	30-53 (Novak & Gill, 2018)
Temperature	Rectal 97.88-100.4, Tympanic 96.44-100.4, oral 95.9-99.5, axillary 97.7-99.5 (Novak & Gill, 2018)
Oxygen Saturation	Greater than 90%-92% any less than 90 indicates respiratory issue. (Novak & Gill,

	2018)
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Normal Vital Sign Range Reference (1) (APA):

Novak, C., & Gill, P. (2018, July 10). *Pediatric vital signs reference chart*. Pediatric Education Online. <https://www.pedscases.com/pediatric-vital-signs-reference-chart>

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1600	rflacc	n/a	0	n/a	n/a
Evaluation of pain status <i>after</i> intervention	n/a	n/a	n/a	N /a	n/a
Precipitating factors: no pain Physiological/behavioral signs: no pain or discomfort					

Intake and Output (1 points)

Intake (in mL)	Output (in mL)
22ml/hr x 6 hr equals 132 ml IV D5-0.45% NaCl IV @ 22mL/hr	105 weighed diaper and wipe, less dry diaper and 1 wet wipe to zero scale. Contained urine and feces.

Developmental Assessment (6 points)

Be sure to highlight the achievements of any milestone if noted in your child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading

Age Appropriate Growth & Development Milestones

1. **Posterior fontanel closed**
2. **Grasps object in hand (grabbed finger)**

3. **Hold hand in front of face**

Age Appropriate Diversional Activities

1. **mobile**
2. **music**
3. **Talking to infant and touch**

Psychosocial Development:

Which of Erikson's stages does this child fit? 0-12 months Trust vs Mistrust (Ricci et al., 2021).

What behaviors would you expect? **Calming when being consoled or diaper changed.**

What did you observe? **Infant was calmed with touch and a diaper change.**

Cognitive Development:

Which stage does this child fit, using Piaget as a reference? **Sensorimotor** (Ricci et al., 2021).

What behaviors would you expect? **Reaching for objects to touch/explore**

What did you observe? **Infant reached for my finger and grabbed.**

Vocalization/Vocabulary:

Development expected for child's age and any concerns? Yes, no concern for development.

Any concerns regarding growth and development? Child is having issues eating and keeping down nutrition. Presently NPO and patient is awaiting a surgical consultation.

Developmental Assessment Reference (1) (APA):

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

<p>Nursing Diagnosis</p> <ul style="list-style-type: none"> • 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. 	<p>Rational</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Interventions (2 per dx)</p>	<p>Outcomes</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the Client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
<p>1. Risk for impaired gas exchange related to thick secretions</p>	<p>Patient has acute respiratory failure</p>	<p>1. Monitor O2 saturation-put on</p>	<p>1. Patient is able to maintain 90% O2</p>	<p>Client and family both responded to suctioning</p>

<p>secondary to infection, as evidenced by ineffective mucus clearance heard in breath sounds (Carpenito, 2017).</p>	<p>secondary to parainfluenza virus and rhinovirus.</p>	<p>monitor with alarm. Patient on titrated oxygen.</p> <p>2.Elevate bed for infant to promote drainage. Utilize nasal and oral suctioning as needed.</p>	<p>saturation. Patient had maintained O2 Sat during shift.</p>	<p>required. Patient was able to rest comfortably with minimal coughing due to cleared nares with suction.</p> <p>Goal was achieved with interventions in place.</p>
<p>2. Risk for infection related to compromised immune system as evidenced by parainfluenza virus and rhinovirus infection (Carpenito, 2017).</p>	<p>Patient has acute respiratory failure secondary to parainfluenza virus and rhinovirus infection.</p>	<p>1. Isolation protocols in place to prevent further exposure to patient.</p> <p>2.Limit number of visitors and to immediate family only.</p>	<p>1.Patient will remain free from other virus or infection from outside source. Patient free of new fever or symptoms.</p>	<p>Patient family did not wear isolation gear when entering patient room. Patient family did wear isolation gowns and gloves when holding patient.</p> <p>Patient family exceeded visitor limit of 2 and having outside visitor. Hospital staff asked family to reduce number of</p>

				visitors in room. Patient is an infant who would not know if there were more people in room or not.
<p>3. Imbalanced nutrition related to gastrointestinal complications/deformities as evidenced by abdominal distention (Carpenito, 2017).</p>	<p>Patient has markable abdominal distention, XKUB reveals air in abdominal wall.</p>	<p>1. Patient placed on NPO for gastric rest. Utilize comfort measures to calm infant-music/mobile</p> <p>2. Patient will get IV d5 continuous 22ml/hr to supplement nutrition.</p>	<p>1. Patient will remain comfortable due to receiving continuous IV fluids. Pacifier, music, and mobile will keep client content and distracted from desire to feed.</p>	<p>Patient was comfortable and rested well. Feedings were administered via IV. Pacifier offered and music calmed infant. Patient family was receptive of treatment regimen.</p>
<p>4. Risk for complications of dysfunctional gastrointestinal motility related to pyloric stenosis as evidenced by abdominal distention (Carpenito, 2017).</p>	<p>Patient placed on NPO diet, abdomen enlarged with air trapped and probable pyloric stenosis found on xkub. Surgeon consult was</p>	<p>1. Patient will receive simethicone drops to relieve abdominal distention and gas every 6 hr as needed.</p> <p>2. Patient will get IV d5</p>	<p>1. Patient will remain pain free while receiving simethicone drops to keep gas build up from further abdominal</p>	<p>Patient remained comfortable and had a rflacc score of 0 with markable abdominal distention present.</p> <p>Patient and family were able to visit with IV</p>

	scheduled on 06/22/22.	continuous 22ml/hr to supplement nutrition.	distention. rFlacc score indicates patient comfortable.	running. (family held infant, infant content)
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Other References (APA):

Carpenito, L.J., (2017) *Nursing Diagnosis: Application to Clinical Practice Fifteen Edition.*

Philadelphia, PA: Wolters Kluwer

Concept Map (20 Points):

Subjective Data

Fever, cough, post-tussive emesis, 4 days post vaccinations. Presented to convenient care and sent to ED, now resided at Carle in Urbana, Illinois for further treatment.

Nursing Diagnosis/Outcomes

Risk for impaired gas exchange related to thick secretions secondary to infection, as evidenced by ineffective mucus clearance and decreased breath sounds (Carpenito, 2017). Patient will maintain 90% O2 saturation.
Risk for infection related to compromised immune system as evidenced by parainfluenza virus and rhinovirus infection (Carpenito, 2017). Patient will remain free from other virus or infection from outside source. Patient free of new fever or symptoms
Imbalanced nutrition related to gastrointestinal complications/deformities as evidenced by abdominal distention (Carpenito, 2017). Patient will remain comfortable due to receiving continuous IV fluids. Pacifier, music, and mobile will keep client content and distracted from desire to feed.
Risk for complications of dysfunctional gastrointestinal motility related to pyloric stenosis as evidenced by abdominal distention (Carpenito, 2017).
Patient will remain pain free while receiving simethicone drops to keep gas build up from further abdominal distention. rFlacc score indicates patient comfortable.

Objective Data

Abnormal Results: platelet, wbc, neutrophil, monocyte, bands, potassium, ast, alt, alk phos. Creatnine.
Fall risk 2, braden score 8. O2 3L/25%.
Abdominal distention, NPO, IV d5 at 22mL/hr. Vital signs b/p 125/57, O2 92 nasal cannulas. Wheeze/fine crackles in lungs. Xkub shows enlarged liver and pneumatosis.

Client Information

4-month-old male born premature at 34-week gestation, twin. Admitted for nasal/cough, post-tussive emesis and subcostal retraction. Tested positive for parainfluenza virus and rhinovirus. Previous surgery Right inguinal hernia repair and circumcision (04/15/2022).

Nursing Interventions

