N311 Care Plan 4

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Lakeview College of Nursing

N311: Foundations of Professional Practice

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Demographics (5 points)

Date of Admission 10/29/2024	Client Initials DKS	Age 71 years of age	Gender Female
Race/Ethnicity Caucasian	**Occupation** Dog Grooming Service	**Marital Status** Married for 25 years	**Allergies** *Iodine- Rash* *Penicillin V Potassium- Rash* *Tramadol- Itching* *Bactrim (sulfamethoxazole-trimethoprim)- Rash* *Codeine- Rash*
Code Status **FULL CODE**	**Height** 5’7	**Weight** 237 lbs	

Medical History (5 Points)

Past Medical History: Anemia, Arthritis, Coronary Artery Disease, Fibromyalgia, History of umbilical hernia, Hyperlipidemia, hypertension, Kidney Disease, Mechanical Loosen of internal left knee prosthetic joint, Obstructive sleep apnea, Retroperitoneal.

Past Surgical History: Appendectomy, Breast Surgery (biopsy), Cardiac Catheterization (left 05/24/2022), Cardioversion 6/30/2023, Carpal Tunnel release – bilateral, Cholecystectomy.

Family History: Heart Disease (Mother, Father, Maternal Grandmother, Maternal Grandfather)

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Never smoked or had a drink in her life.

Admission Assessment

Chief Complaint (2 points): Shortness of breath

History of Present Illness – OLD CARTS (10 points): Client arrived at the ED on 10/24/2024 reporting Shortness of Breath. The client states that it began around 7:15 am this morning while walking to the bathroom. She states her chest get tight and she has a feeling of not enough air, which she states is very moderate to severe. The client states that the feelings come when she physical starts to walk upstairs or a long distance. She states it improves slightly when they sit down and rest. She also states that lying flat exacerbates the shortness of breath. The client states she hasn't tried anything to help with the shortness of breath.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Pneumonia

Secondary Diagnosis (if applicable): Congestive Heart Failure

Pathophysiology

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

My patient came to the hospital with shortness of breath due to Pneumonia. Pneumonia is an infection in the lungs that leads to inflammation and impaired gas exchange. "Pneumonia is most commonly caused by inhalation of droplets containing bacteria or other pathogens" (Capriotti 489). This is most common through "inhalation of chemicals, aspiration of contents from the oropharynx or stomach, or infection by other infectious agents sch as rickettsiae and fungi may occur", (Capriotti 488). This causes swelling and fluid buildup in the air sacs which makes it harder for the lungs to take in oxygen and to get rid of carbon dioxide which causes shortness of breath, and this was presented in my client. My client presented with crackling in the lungs which is one of the signs of pneumonia. "Crackles are respiratory sounds often heard in chronic obstructive pulmonary disease (COPD) as well as in restrictive conditions, such as heart failure, lung fibrosis and pneumonia", (Melbye 2021 pg 1). This is caused by "mucous and exudative edema' which 'accumulates between the alveoli and capillaries" (Capriotti 489).

Pathophysiology References (2) (APA):

Capriotti, T. (2024). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis Company.

Melbye, H., Aviles Solis, J. C., Jácome, C., & Pasterkamp, H. (2021). Inspiratory crackles—early and late—revisited: Identifying COPD by Crackle characteristics. *BMJ Open Respiratory Research*, *8*(1). https://doi.org/10.1136/bmjresp-2020-000852

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.80-5.30mcL	2.87	2.99	Decrease red blood count can indicate Anemia. (pagan 750)
Hgb	12.0-15.8 g/dL	9.4	9.9	Decrease of Hemoglobin can indicate Anemia. (pagan 480)
Hct	36-47%	28.3	30.1	Decrease hematocrit can indicate Anemia. (pagan478)
Platelets	140-440 10(3)/mcL	139	152	n/a
WBC	4.00-12.00 mcL	13.60	8.20	Increased white blood count can mean an inflammation or infection. (pagan 949)
Neutrophils	47.0-73.0%	80	73	n/a
Lymphocytes	18-42%	13	5.0	This means that there is inflammation in the body which leaves fewer lymphocytes in circulation.
Monocytes	4.0-12.0	6.0	5.0	n/a
Eosinophils	0.0-5.0	3.0	2.0	n/a
Bands	n/a	n/a	n/a	n/a

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136-145 mmol/L	138	137	n/a
K+	3.5-5.1 mmol/L	3.9	3.8	n/a
Cl-	98-107 mmol/L	102	101	n/a
CO2	22-30 mmol/L	26	27	n/a
Glucose	70-99 mg/dL	164	107	Increased level could indicate hyperglycemia, (pagan 453)
BUN	10-20 mg/dL	58	79	Increased BUN may be a sign of sepsis. (pagan 150-151)
Creatinine	0.60-1.00 mg/dL	1.73	1.81	This may because of the infection in the body cause decrease of blood flow which can impair kidney function. (Pagana, 296-297)
Albumin	3.5-5.0 g/dL	3.0	2.9	Low albumin is a sign of an infection.
Calcium	8.7-10.5 mg/dL	9.2	8.9	n/a
Mag	1.6-2.6 mg/dL	1.8	1.9	n/a
Phosphate	n/a	n/a	n/a	n/a
Bilirubin	0.2-1.2 mg/dL	1.8	1.7	n/a
Alk Phos	40-150 U/L	98	95	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	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow/Clear	Dark yellow	Clear yellow	N/A

pH	5.0-9.0	5	N/A	N/A
Specific Gravity	1.003-1.030	1.016	N/A	N/A
Glucose	Negative	Negative	Negative	N/A
Protein	Negative	2+!	Negative	N/A
Ketones	Negative	Negative	Negative	N/A
WBC	0-5/hpf	1+!	N/A	N/A
RBC	Negative	Negative	Negative	N/A
Leukoesterase	Negative	Negative	Negative	N/A

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

Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Explanation of Findings**
Urine Culture	No growth	No growth	No growth	**N/A**
Blood Culture	No growth	No growth	No growth	**N/A**
Sputum Culture	Negative	Negative	Negative	No recent pneumococcal.
Stool Culture	**N/A**	**N/A**	**N/A**	**N/A**

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby's Diagnostic and Laboratory Test Reference*. Elsevier.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

"A chest x-ray is the most important diagnostic study in the diagnosis of pneumonia", (489). An X-ray on the chest was taken. The x-ray showed interval decrease in lung volume with interval increase in bilateral lung opacites with possibly exaggerated given degree of hypoinflation. On the right internal jugular central venous catheter is present. No pneumothorax . Lines and tubes unchanged and in good position. Persistent mass-like consolidation right mid and lower lung.

Diagnostic Imaging Reference (1) (APA):

Capriotti, T. (2024). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis Company.

Current Medications (10 points, 2 points per completed med)

5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	Amoxicillin (AMOXIL)	Apixaban (Eliquis)	Albuterol (PROVENTIC)	Escitalopram (LEXAPRO)	Gabapentin (NEURONTIN)
Dose	2 capsule 1,000	Tablet 5mg	2.5mg/3ml	10 mg	300 mg
Frequency	2x daily	2x daily	3x daily	Daily	2x daily
Route	Oral	Oral	Nebulization	Oral	Oral
Classification	Pharmacologic class: Aminopenicillin Therapeutic class: Antibiotic	Pharmacologic class: factor Xa inhibitor Therapeutic class: Anticoagulant	Pharmacologic class: Adrenergic Therapeutic class: Bronchodilator	Pharmacologic class: Selective serotonin reuptake inhibitor Therapeutic class: Antidepressant	Pharmacologic class: 1-amino-methyl cyclohexane acetic acid Therapeutic class: Anticonvulsant

Mechanism of Action	"Kills bacteria by binding to and inactivating penicillin-binding proteins on the inner bacterial cell wall, weakening the bacterial cell wall and causing lysis", (jones&bartlett 72).	"Inhibits free and clot bound factor Xa ad prothrombinase activity. Although apixaban has no direct effect on platelet aggregation induced by thrombin. By inhibiting factor Xa, apixaban decreases thrombin generation and thrombus development", (Jones &Bartlett, 89)	"Attaches to beta2 receptors on bronchial cell membranes, which stimulates the intracellular enzyme adenylate cyclase to convert adenosine triphosphate (ATP) to cyclic adenosine monophosphate (cAMP).	Inhibits reuptake of the neurotransmitter serotonin by CNS neurons, thereby increasing the amount of serotonin available in nerve synapses. An elevated serotonin level may result in elevated mood and reduced anxiety or depression.	**"**Gabaoentin is structurally like gamma-aminobutyric acid, the main inhibitory neurotransmitter in the brain Although gabaoententins exact mechanism of action is unknown, GABA inhibits the rapid firing of neurons associated with seizures. It painful stimuli and pain related responses to a normally innocuous stimulus to account for its effectiveness in relieving postherpetic neuralgia and restless legs syndrome symptoms", **(** jones&bartlett 618).
Reason Client Taking	**It helps fight the bad bacteria in the lungs**	**It helps keep your blood from clotting.**	**It opens your airways so you can**	**This medication is for the client's**	**This medication helps with pain.**

	that causes pneumonia.		**breathe easier.**	**mood.**	
Contraindications (2)	Hypersensitivity to amoxicillin, other beta lactam antibiotics or their components.	Active pathological bleeding, serve hypersensitivity to apixaban or its components. (jones&bartlett 89)	Hypersensitivity to albuterol	"Concomitant therapy with pimozide/ hypersensitivity to escitalopram, citalopram or its components, use within 14 days of MAO inhibitor therapy, including intravenous methylene blue or linezolid". (jones&bartlett 489)	Hypersensitivity to gabapentin or its components.
Side Effects/Adverse Reactions (2)	Agitation, Anxiety	Hypotension Hematuria	Anxiety, dizziness,	Acute psychosis, dizziness.	Lathered proprioception, amnesia

Medications Reference (1) (APA):

Nurse's Drug Handbook Jones & Bartlett Learning. (2024a). . Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

General, Psychosocial/Cultural, and TWO focused assessment specific to the client.

GENERAL:	The client was alert. The client was not in any distress. The client was very talkative and ready

Alertness: **Orientation:** **Distress:** **Overall appearance:**	to get her day started. The client was oriented and appropriate for her age.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	The skin appears evenly pigments. No cyanosis pallor or jaundice. The skin is smooth and intact, with some wrinkles due to her age. The skin is warm upon touch. There is no excessive warmth or coolness indicating proper circulation. There is no sign of infections. Skin turgor is less than 3 seconds which indicates proper hydration. No rashes, lesion bruises or wounds are present. Patient Braden score is a 19 which place her in the low risk. No drainage is present.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Face and neck is symmetrical. Oral mucosa is moist. No visible deformities. No tenderness while palpating. The neck is full of a range of motion no signs of stiffness. Trachea is midline with no jugular vein distention. The skin is intact with no signs of lesion, rashes or infections. .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:**	Heart signs are regular rate and normal rhythm. Her S1 and S2 are normal without gallops and/ or murmurs. Her cardiac rhythm is regular. Peripheral Pulses are normal. No signs of diminished or absent noted. Capillaries refill less or equal to 3 seconds.

Neck Vein Distention: Y ☐ N ☒ **Edema Y ☐ N ☒** **Location of Edema:**	
RESPIRATORY: **Accessory muscle use: Y☒ N ☒** **Breath Sounds: Location, character**	Posterior: crackles (all) Right lower lung: crackles/coarse Right Upper Lung: diminished Left lower lung: crackles/ coarse Left upper Lung: diminished Right middle Lung: diminished Client is on a breathing machine and, she has to use
GASTROINTESTINAL: **Diet at home:** Regular **Current Diet:** Cardiac Diet **Height:** 5'7 **Weight:** 237 **Auscultation Bowel sounds:** All four quadrants are normative. **Last BM:** 10/28/2024 **Palpation: Pain, Mass etc**.: Nontender or masses present. No pain. **Inspection:** **Distention:** No distention **Incisions:** No incisions **Scars:** No scars **Drains:** No drains **Wounds:** No wounds **Ostomy: Y ☐ N ☒**	.

Nasogastric: Y ☐ N ☒ **Size: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	
GENITOURINARY: **Color:** Clear yellow **Character:** No aroma no blood. **Quantity of urine:** Voids in the toilet **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type: N/A** **Size: N/A**	
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** Gait Belt and Walker **Strength:** Generalized weak **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 92.19** **Activity/Mobility Status**: Not able to walk without a walker. Uses a gaitbelt and a walker. **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☒	Arthritic changes are present in knee joint and other joint bilateral upper extremity functional. Bilateral lower extremities functional. Calves are non-tender. Homan signs are negative.

Needs support to stand and walk☒	
NEUROLOGICAL: **MAEW: Y** ☒ **N**☐ **PERLA: Y** ☒ **N**☐ **Strength Equal: Y** ☒ **N** ☐ **if no - Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Mental status is intact with no sign of confusion, and she is not disoriented. Her speech is clear, she is coherent. Her speech is appropriate for her age. The patient is conscious and has a normal level of consciousness.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The client states that her and her family attend therapy at their church every Thursday. She copes by reading her bible. Her Developmental is appropriate for her age. She's Catholic. She lives with her husband and daughter.

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
6:33 am	70	145/81	16	96.7	98 on nasal 2l/min

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions

8:15 am	0-10 word	Back leg	8	Constant aching	Pain medication given

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
960 mL	Void x1 clear yellow in toilet.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with “related to” and “as evidenced by” components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective breathing patterns related to pneumonia are evidenced by shortness of breath.	Patients came to the hospital with this complaint.	1.Auscultate breath sounds at least every 4 hours. (Phelps 78) 2.Observe signs of respiratory distress (nasal flaring, tachypnea, retractions, grunting and use of	1. When a patient carries out ADLs breathing pattern remains normal. (Phelps 79)	The client was able to do her hygiene and other daily activities with normal breathing.

		accessory muscles for breathing. (Phelps 79)		
2. Impaired gas exchange related to pneumonia as evidence by use of nasal canal and stating trouble breathing.	The client has to use a nasal canal without the nasal canal client has trouble breathing.	1. Perform bronchial hygiene as ordered including coughing percussion, postural drainage and suctioning, (Phleps 278). 2.Mointor vital signs and heart rhythm at least every 4 hours to detect tachycardia and tachypnea which could indicate hypoxemia, (Phelps 278)	1. Patient respiratory rate remains within established limits, (Phelps 279)	Patient respiratory rate remained normal while I was on the floor.

Other References (APA):

Phelps, L. L. (2023). *Nursing diagnosis reference manual*. Wolters Kluwer.

Concept Map (23 Points):

Subjective Data

Nursing Diagnosis/Outcomes

Nursing Interventions

Objective Data

Client Information