N311 Care Plan #1

Lakeview College of Nursing

Patricia East

Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
9/9/2019	AM	93	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White	Nurse	Widowed	Morphine
Code Status	**Height**	**Weight**	
Full	5'0"	134.6 lbs	

Medical History (5 Points)

Past Medical History: Patient has a history of acute CHF, acute kidney injury, chronic lymphocytic leukemia, dementia, depression, essential hypertension, paroxysmal atrial, acute dyspnea, hyperthyroidism, hyperlipidemia, and anemia deficiency.

Past Surgical History: Patient had a tricuspid valve annuloplasty in March of 2008 and a mitral valve replacement in May of 2016.

Family History: Patient states, "I cannot remember any family history".

Social History (tobacco/alcohol/drugs): Patient lives in Urbana, IL. Worked as a Registered Nurse at Mercy Hospital. Her husband is deceased. She has two daughters and two sons. She lives with one of her daughters. She states "I go to church every Sunday". No use of alcohol or tobacco products. No use of illicit drugs.

Admission Assessment

Chief Complaint (2 points): Patient presents difficulty breathing and chest pains.

History of present Illness (10 points): Patient reports to have difficulty breathing with a temperature. She was taken to the emergency room by daughter. They treated Mrs. M for pneumonia and congestive heart failure. She has been weak with ambulating and other daily activities and finds it difficult to catch her breath. Patient has a recent onset of fatigue.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Pneumonia

Secondary Diagnosis (if applicable): Congestive heart failure

Pathophysiology of the Disease, APA format (20 points): Pneumonia is when the alveolar air spaces fill with purulent, inflammatory cells, and fibrin. It is caused by a bacteria or a virus that a person contracts through inhalation of chemicals, aspiration of solids/fluids, or from other infectious agents. The infectious agent, bacteria, or virus enters the host through upper airways and travels to the lung tissue. The infectious agent will then attach itself to the respiratory epithelium and an inflammatory response begins. There will an acute inflammation response that spreads throughout the lower respiratory tract and alveoli. Vasodilation occurs to increase neutrophils into the air spaces to fight off infection. Neutrophils phagocytize microbes and kill them with reactive oxygen species, antimicrobial proteins, and degradative enzymes. There will be an increase in respiratory goblet cells that secrete mucus. Between the alveoli and capillaries will be an increase in mucous and exudate edema. Alveoli will try to close and open against the purulent exudate, but some are unable due to the inflammation. You can hear alveoli attempting to open through auscultation with a stethoscope over the lungs and hearing crackle noises. Optimal gas exchange is at risk due to a layer of edema and infectious exudate at the capillary-alveoli interface.

Pathophysiology References (1) (APA):

Capriotti, T., & Frizzell, J.P. (2016). *Pathophysiology: Introductory Concepts and Clinical Perspectives.* Philadelphia: F.A. Davis Company.

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	3.50-5.20	3.35	3.07	RBC low due to patient being anemic
Hgb	11.0-16.0	10.8	9.7	Hgb low due to taking antibiotic and sulfonamides (Lasix)
Hct	34.0-47.0	34.5	31.5	Hct low due to taking antibiotics and possibly from leukemia
Platelets	140-400	156	131	Platelets low due to taking sulfonamides (Lasix) and Omeprazole
WBC	4.00-11.0	16.29	17.24	WBC high due to pneumonia infection
Neutrophils				
Lymphocytes				
Monocytes				
Eosinophils				
Bands				

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-	135-145	140	144	
K+	3.5-5.1	3.1	4.3	
Cl-	N/A	N/A	N/A	
CO2	N/A	N/A	N/A	

Glucose	**70-99**	**101**	**84**	
BUN	**6-20**	**43**	**54**	**BUN high due to CHF**
Creatinine	**0.5-1**	**1.73**	**1.42**	**Creatinine high due to hypothyroidism**
Albumin	**3.5-5.5**	**N/A**	**3.6**	
Calcium	**8.4-10.5**	**10.1**	**10.9**	**Calcium high due to hyperthyroidism.**
Mag	**N/A**	**N/A**	**2.5**	
Phosphate	**N/A**	**N/A**	**N/A**	
Bilirubin	**N/A**	**N/A**	**N/A**	
Alk Phos	**N/A**	**N/A**	**N/A**	

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

Lab Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Reason for Abnormal**
Color & Clarity				
pH				
Specific Gravity				
Glucose				
Protein				
Ketones				

WBC				
RBC				
Leukoesterase				

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				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Diagnostic Imaging

All Other Diagnostic Tests (10 points): X-ray test to diagnose pneumonia.

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	**Sertraline/Zoloft**	**Warfarin/Coumadin**	**Omeprazole/ Losec (CAN), Prilosec**	**Furosemide/Lasix**	**Levoflox-acin/ Levaquin**
Dose	**25 mg**	**2.5mg**	**40mg delayed release**	**40 mg**	**500 mg**
Frequency	**1 tablet/day**	**3.76 mg daily expect Mon/Wed/Fri take 2.5 mg = 22.5 mg/week**	**1 capsule before breakfast**	**1.5 tablets/day**	**1 tablet/day for two days**
Route	**Oral**	**Oral**	**Oral**	**Oral**	**Oral**
Classification	**Chemical Class: Naphthylamine derivative Therapeutic class: antianxiety, antidepressant, antiobsessant, antipanic, antiposttraumatic stress**	**Chemical Class: Coumarin derivative Therapeutic Class: anticoagulant.**	**Chemical Class: Substituted benzimidazole Therapeutic Class: antiulcer**	**Chemical class: Sulfonamide Therapeutic Class: Antihypertensive, diuretic**	**Chemical class: Fluoroquin-olone Therapeutic Class: Anti-biotic**
Mechanism of Action	**Inhibits reuptake of neurotransmitter serotonin by CNS neurons. This increases serotonin available in nerve synapses. Elevated serotonin results in elevated mood and reduce depression**	**Interferes with the liver's ability to synthesize vitamin K- dependent clotting factors, depleting clotting factors II, VII, IX, and X. This interferes with clotting cascade and prevents coagulation.**	**Interferes with gastric acid secretions by inhibiting hydrogen potassium adenosine triphosphatase enzyme system or proton pumps, in gastric parietal cells.**	**Inhibits sodium and water reabsorption in the loop of Henle and increase's urine formation.**	**Interferes with bacterial cell replication by inhibiting the bacterial enzyme DNA gyrase, which is essential for repair and replication for DNA.**

Reason Client Taking	**To treat depression**	**To prevent thromboembolic complications from heart valve replacements.**	**To treat GERD**	**To reduce edema caused by heart failure, cirrhosis, and renal disease.**	**To treat Community - Acquired Pneumonia**
Contraindications (2)	**Disulfiram Pimozide**	**Bleeding or bleeding tendencies. Malignant or severe uncontrolled hypertension.**	**Therapy with rilpivirine-containing products Hypersensitivity to Omeprazole**	**Anuria unresponsive to furosemide, sulfonamides, or their components**	**Hypersensi-tivity to levofloxacin, myasthenia gravis**
Side Effects/Adverse Reactions (2)	**CNS: abnormal dreams, aggressiveness, confusion. RESP: Bronchospasm, coughing, dyspnea, pulmonary hypertension**	**VS: Chest pain, angina, and hypotension. GI: Abdominal cramps and pain, diarrhea, nausea, vomiting.**	**CNS: Agitation, dizziness, fatigue, and headaches. CV: Chest pain, hypertension**	**CNS: Dizziness, drowsiness, fever, headache, lethargy, restlessness, vertigo. CV: Arrhythmias, elevated cholesterol, orthostatic hypotension, thromboembolism.**	**CNS: anxiety, confusion, dizziness, paranoia. RESP: Allergic Pneumonitis**

Medications Reference (APA):

Jones & Barlett Learning. (2019). ***2019 Nurses Drug Handbook.*** **Burlington, MA.**

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient is alert and oriented x3. Does not appear to be in any distress or pain. Overall appearance is good. Patient is awake and excited to discharge home later today.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**Skin color is pink and warm. Pt denies any itching/rashes. There are minor bruising present on left hand and arm and right arm. Turgor <3 second. Braden score is 20. There are no drains present.**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Denies any pain IN HEENT. Pt wears glasses for corrective vision. Hearing aids for hearing. No red/swelling in ears. Eyes are symmetrical. PERRLA. Right ear lid droops. Denies feeling dizzy, vertigo when feeling short of breath. No swollen glands or lymph nodes. Pt has upper dentures.**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒**	**Diagnosed with CHF on 9/2/2016. A murmur present in Pulmonic area. Cardiac rhythm normal. Pt denies pain in chest. Capillary refill <3 seconds.**

Edema Y ☐ N ☒ **Location of Edema:**	
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	**Breath sounds were clear and normal bilaterally. Pt feels short of breath and is wearing nasal cannula with 2L of oxygen.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Diet at home: regular** **Current diet: regular** **Height: 5’0”** **Weight: 134.6 lb** **Normal hyperactive bowel sounds in all four quadrants.** **Last BM:9/23/2019.** **No pain present in four quadrants.** **No distention, incision, scars, drains, or wounds.** **No ostomy, nasogastric, or feeding tube present.**
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Normal urine output. No dysuria. Urine color is pale yellow. No odor. Patient denies any genitalia pain, hematuria or flank pain while urination.**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:**	**No abnormalities found with neurovascular. Pt has good ROM. Walker is used when ambulating. Strength is equal in all four limbs. Pt requires little to no help with daily activities. Pt is not a fall risk. Fall score: 20. Up independently.**

Independent (up ad lib) ☒ **Needs assistance with equipment** ☐ **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:**	**Pt moves all extremities well. Pupils are equal, round, react to light, and accommodate. Strength is equal in all four limbs. Pt is alert and communicates without ques. Speech is normal and clear.**
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):**	**Pt seems to cope well with lifestyle changes. No development problems. Pt states "I'm Christian and it's important to me". She currently lives with one daughter, Reba. She says "Reba takes very good care of me and I know she will help me at home". She has another daughter and two sons.**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0944	74	137/72	16	97.8	96

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0940	0	0	0	0	0

Intake and Output (2 points)

Intake (in mL):	Output (in mL) :
675	200

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Patient is at risk for poor gas exchange related to pneumonia evidence by shortness of breath when ambulating long distance.	**I choose this diagnosis because the patient has shortness of breath due to pneumonia, Pneumonia causes fluid to build up in the lungs which causes shortness of breath.**	**1. Administer oxygen as prescribed and monitor O2 stats** **2. Patient will walk to and from bathroom without shortness of breath**	**Family agreed with interventions. This first intervention goal was met. Client wears oxygen at 2L. Patients stats are at 96%.** **The second intervention goal was met Patient walked to and from bathroom without shortness of breath.**
2. Patient is at risk for anxiety due to potentially life-threatenin g situations evidence by expressing concerns and anxiety about new diagnoses of Congestive Heart Failure.	**I choose this diagnosis because the patient has anxiety about her medical diagnosis and is scared of what obstacles she will come across in the future. Being aware of her anxieties and allowing her to talk through them allows her to process and understand what she needs to do to be successful at home.**	**1. Create a calm and quiet environment** **2. Asses and acknowledge patient's anxieties and provide opportunities for education and time for them to express feelings**	**Family agreed with intervention and learned the importance of a calm and quiet environment. This intervention was met with muting the tv, asking those around to be quiet, and closing the door. Pt was calm and showed no signs of anxiety.** **The second intervention was met by allowing family and patient to ask questions during education to receive further educations on subjects that they feel they need.**

Other References (APA):

Swearingen, P.L., & Wright, J. D. (2019). ***All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health.*** **St.Louis, MO: Elsevier.**

Concept Map (20 Points):

Subjective Data

Patient states that she is having difficulty breathing and is having chest pains. She also feels fatigued and anxious.

Nursing Diagnosis/Outcomes

Patient is at risk for poor gas exchange due to pneumonia evidence by shortness of breath when ambulating long distances – goal met, patient was able to ambulate to bathroom without shortness of breath, O2 stat at 96%
Patient is at risk for anxiety due to potentially life-threatening evidence by expressing anxiety and concern about new diagnoses and going home – goal met, when patient was expressing concerns I was able to talk about anxieties and help her feel calm.

Objective Data

Pt has shortness of breath when ambulating long distance. She falls asleep between conversations in her room. She seems anxious when talking about going home later this week. She doesn't want to return back to the facility. X-ray done shows Pneumonia.

Patient Information

Pt is a 93 year old who is widowed. She lives at home with one of her daughters. She was recently diagnosed with CHF and Pneumonia

Nursing Interventions

Patient will ambulate to and from bathroom without
becoming short of breath
dminister Oxygen as prescribed
reate a calm and quiet environment
ssess and acknowledge patient's anxieties and
provide opportunities for education and time for them
to express feelings.

BNP	↓	↑	DRUGS
Na+ **135-145**	Addison's disease Renal diseases Cirrhosis Heart failure Ketonuria	Cushing syndrome Diabetes insipidus Excessive fluid loss Malnutrition Dehydration.	↑ : NSAIDs, laxatives, birth control pills, corticosteroids and lithium. ↓ : Diuretics, morphine, SSRIs
K+ **3.5-5.1**	Anorexia nervosa, Malnutrition Diarrhea, Vomiting Poorly managed diabetes Hyperaldosteronism	Infection, Injury to tissue Dehydration Addison's disease Diabetes, Kidney failure Hypoaldosteronism	↑ : ACE ↓ , beta blockers, NSAIDs, K+ sparing diuretic ↓ :Amphotericin B, gentamicin, carbenicillin, corticosteroids, beta-adrenergic agonists, K+ wasting diuretics
Cl- **98-107**	Vomiting, Sweating, Burns Dehydration, Gastric suction Chronic lung diseases Addison's disease, Bartter syndrome Congestive heart failure Metabolic alkalosis Compensated resp acidosis Hyperaldosteronism, SIADH	Diarrhea Metabolic acidosis Compensated respiratory alkalosis Kidney diseases, Renal tubular acidosis Bromide poisoning Cushing syndrome Hyperventilation	↑ : Carbonic anhydrase inhibitors. ↓ :Diuretics
CO2 **22-29**	Hyperventilation (Resp Alk) Cirrhosis (Resp Alk) Pneumonia (Resp Alk) Liver failure (Resp Alk) Diabetes (Met Alk) Diarrhea (Met Alk) Aspirin OD (Met Alk) Kidney failure (Met Alk) Heart Failure (Met Alk)	Pneumonia (Resp Acidosis) COPD (Resp Acidosis) Conn Syndrome(Met Acidosis) Cushing's (Met Acidosis) Alcoholism (Met Acidosis) Vomiting	@MarlindaJane
Glucose **70-99**	<40 hypoglycemia, an insulinoma, hypothyroidism Addison disease malnutrition. anorexia cirrhosis kidney failure	Diabetes High carb intake Stress Inactivity	Smoking Birth control pills Prednisone Activity
BUN **6-20**	Low protein diet Malnutrition Liver failure Fluid overload	Hypovolemia, Shock ↑ protein levels in GI tract Congestive heart failure, MI Gastrointestinal bleeding Urinary tract obstruction Glomerulonephritis Kidney failure, Pyelonephritis Acute tubular necrosis	↑ : llopurinol, furosemide, indomethacin, cisplatin, methyldopa, propanolol, tetracyclines, rifampin, vancomycin, thiazide diuretics, gentamycin, carbamazepine, aminoglycosides, amphotericin B. ↓ : Streptomycin, chloramphenicol.
Creatinine **0.5-1**	Spinal cord injuries Cachexia Sudden decrease in activity.	Preeclampsia Dehydration, Renal problems Rhabdomyolysis Blocked urinary tract Myasthenia graves, Hyperthyroidism Muscular dystrophy	↑ :minoglycosides, methicillin, lithium, amphotericin B, cistplatin, plicamycin, dextran,cyclosporine, gallium, streptozocin hydroxyurea, methoxyflurane, pentamidine, ↓ :Neuromuscular blocking agents.
Ca+ **8.4-10.5**	Malnutrition, vitamin D deficiency Hypoparathyroidism Low blood level of albumin Kidney failure, Liver disease Magnesium deficiency Osteomalacia, Pancreatitis	Fungal & mycobacterial infections HIV/AIDS, Tuberculosis Hyperparathyroidism Metastatic bone tumor Paget's disease, Multiple myeloma Osteomalacia, Sarcoidosis Hyperthyroidism	↑ :Lithium, tamoxifen, thiazides, calcium supplements, vitamin D supplements

@MarilindaJane	LOW ↓	HIGH ↑	DRUGS
WBC 4-9	Autoimmune disorders Bone marrow deficiencies Viral diseases Liver problems Spleen problems Severe bacterial infections Radiation therapy	Infections Cigarette smoking Leukemia Inflammatory diseases Tissue damage Physical/mental stress.	↑ :Corticosteroids, heparin, beta adrenergic agonists, epinephrine, granulocyte CSF, Li+. ↓ :Diuretics, chemo, histamine-2 blockers, captopril, anticonvulsants, antibiotics, antithyroid, quinidine, chlorpromazine, terbinafine, clozapine, sulfonamides, ticlopidine.
RBC 3.9-4.98	Bleeding, Anemia, Malnutrition Over hydration Hemolysis Erythropoietin deficiency Leukemia, Multiple myeloma Porphyria Thalassemia, Sickle cell anemia	Dehydration Cigarette smoking Congenital heart disease Pulmonary fibrosis Renal cell carcinoma Polycythemia vera	↑ :Erythropoietin, Fe+ ↓ :Aspirin, antibiotics, sulfonamides, trimethadione, anti-neoplastic drugs, indomethacin, doxapram, rifampin and primaquine.
HGB 12-15.5	Nutritional deficiencies Blood loss, Sickle cell anemia Renal problems Bone marrow suppression Leukemia Lead poisoning Hodgkin's lymphoma	Dehydration Cigarette smoking Polycythemia vera Tumors Erythropoietin abuse Lung diseases Blood doping	↑ :Erythropoietin, Fe+ supplements. ↓ :Aspirin, antibiotics, sulfonamides, trimethadione, anti-neoplastic drugs, indomethacin, doxapram, rifampin, primaquine.
HCT 35-45	Over hydration, Nutritional deficiencies Blood loss Bone marrow suppression Leukemia, Lead poisoning Hodgkin's lymphoma, Chemotherapy	Dehydration Hypoxia Cigarette smoking Polycythemia vera, Tumors Lung diseases Blood doping, Erythrocytosis Cor pulmonale	↑ :Erythropoietin, iron supplements. ↓ : Aspirin, antibiotics, anti-neoplastic drugs.
MCV 81-93 **MCH** 28-35	microcytic iron deficiency anemia thalassemia anemia of chronic disease sideroblastic anemia.	macrolytic vitamin B12 or folate deficiency hemolytic anemia liver disease, alcoholism hypothyroidism aplastic anemia myelodysplastic syndrome.	
MCHC 33-37	May be low when MCV is low; decreased MCHC values (hypochromia) are seen in conditions such as iron deficiency anemia and thalassemia.	(Hyperchromia) are seen in conditions where the hemoglobin is more concentrated inside the red cells: autoimmune hemolytic anemia, burn patients, hereditary spherocytosis	
RDW 11.4-15.2	Small RBC	RBCs vary in size Liver disease Hemolytic anemia Vitamin B12/Folate deficiency	
PLT 140-400	Virus Aplastic anemia Leukemia Alcoholism Vitamin B12 & folic acid deficiency SLE, hemolytic uremic condition, HELLP, DIC, vasculitis, sepsis, splenic sequestration, cirrhosis.	Cancer, allergic reactions, polycythemia vera, recent spleen removal, chronic myelogenous leukemia, inflammation, secondary thombocytosis.	↑ :Romiplostim, steroids, human IgG, immunosuppresants. ↓ : Aspirin, hydroxyurea, anagrelide, chemotherapeutic drugs, statins, ranitidine, quinidine, tetracycline, vancomycin, valproic acid, sulfonamides, phenytoin, piperacillin, penicillin, pentoxifylline, omeprazole, nitroglycerin.
MPV 6-11.1	Indicates average size of platelets is small; older platelets are generally smaller than younger ones and a low MPV may mean that a condition is affecting the production of platelets by bone marrow.	Indicates a high number of larger, younger platelets in the blood; this may be due to the bone marrow producing and releasing platelets rapidly into circulation.	@MarilindaJane