N431 Care Plan #2

Lakeview College of Nursing

Morgan Phillips

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
03.25.21	**C.C**	**64**	**Male**
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/ Presbyterian	**Retired**	**Single**	**Penicillin**
Code Status	**Height**	**Weight**	
Full Code	**175.26**	**57.3kg**	

Medical History (5 Points)

Past Medical History: Affective personality disorder, Ataxic gait, Chronic anemia, dementia, Hypertension, hyponatremia, hypothyroid, epilepsy, left ischial pressure sore, MRSA, Muscle Weakness, Osteoarthritis, TBI, Morbid Obesity

Past Surgical History: Brain Surgery, Left wrist surgery

Family History: Paternal: Hypertension, Anemia; Maternal: Obesity, Hypertension, Hypothyroidism

Social History (tobacco/alcohol/drugs): Past smoker of about a half a pack a day. Client stopped in 2010 but due to being a poor historian he was not able to tell me when he started. This client drank about a 6 pack a week of beer but stopped in 2010, however, because the client is a poor historian he could not tell me when he started using alcohol. This client has no past drug use. (This information was obtained from the client's chart. The client is a poor historian and is not able to explain this information to me.)

Assistive Devices: Hoyer lift, Moon boots, Wheelchair

Living Situation: Lives at Arcola health care nursing home

Education Level: Client is not able to verbalize his education level due to being a poor historian

Admission Assessment

Chief Complaint (2 points): Presents with complaints of a wet cough and client is more lethargic than normal

History of present Illness (10 points): A pleasant 64-year-old male is presented to the emergency room by EMS from Arcola health care with complaints of a wet cough and being more lethargic than normal. Client has a history of a past traumatic brain injury and is now a poor historian. Client can identify himself. Client's symptoms started on the 24th with dyspnea and client developed a cough. The cough is characterized by a wet cough in his lungs. Client's dyspnea was continuous without oxygen and worsened with exertion. Client nodded his head yes when being asked if he was short or breath but shook his head no when asked about chest pain.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Hospital Acquired pneumonia

Secondary Diagnosis (if applicable): Altered Mental Status

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

According to Capriotti & Frizzell, pneumonia is characterized by inflammation of the lung tissue in which the alveolar air spaces fill with purulent, inflammatory cells and fibrin (Capriotti & Frizzell, 2016). Commonly this infection is caused by bacteria or viruses; however, it can be caused by inhalation of chemicals, aspiration of contents, or other infectious agents (Capriotti & Frizzell, 2016). This client is here for pneumonia, but this pneumonia is classified as hospital-acquired pneumonia. Hospital-acquired pneumonia is a lung infection contracted 48 hours of hospital admission (Capriotti & Frizzell, 2016). Hospital-acquired pneumonia affects 5 to 10 per 1000 patients (Capriotti & Frizzell, 2016). The most associated bacteria responsible for hospital-acquired pneumonia is staphylococcus and more specifically, methicillin-resistant

Staphylococcus aureus (MRSA) (Capriotti & Frizzell, 2016). This client already has a past medical history of MRSA, which puts him at a higher risk for hospital-acquired pneumonia. The most common bacteria responsible for pneumonia is S. Pneumoniae and Legionella (Capriotti & Frizzell, 2016).

Pneumonia is mainly caused by the inhalation of droplets that contain bacteria or other pathogens (Capriotti & Frizzell, 2016). That bacteria then enters the upper airways and gain entry into lung tissue which then causes the pathogens to adhere to the respiratory epithelium and stimulate an inflammatory reaction (Capriotti & Frizzell, 2016). This acute inflammation spreads to the lower respiratory tract and alveoli, which causes vasodilation with the attraction of neutrophils out of capillaries into the air spaces (Capriotti & Frizzell, 2016). With this illness, there is excessive stimulation of respiratory goblet cells that secrete mucus that accumulates between the alveoli and capillaries (Capriotti & Frizzell, 2016). Thus, fluid buildup causes the crackling sound because the alveoli are not open and close against the purulent exudate (Capriotti & Frizzell, 2016). The layer of infectious exudate at the capillary alveoli hinders optimal gas exchange and causes the patient to become hypoxic and hypercapnic with the obstructed exchange of O2 and CO2 at the pulmonary capillaries (Capriotti & Frizzell, 2016).

When assessing your client initially, it is essential to assess other ill persons' exposure, aspiration risks, or immunosuppression factors (Capriotti & Frizzell, 2016). It is also necessary to determine the client's past medical history and pay close attention to asthmatics, influenza, or those with COPD, and those conditions increase susceptibility to pneumonia (Capriotti & Frizzell, 2016). Some common signs and pneumonia symptoms include a cough that may produce phlegm, fatigue, fever, shortness of breath, confusion, or changes in mental awareness, or even chest pain with breathing or coughing (Mayo Clinic, 2018). A client may also present

with tachypnea, accessory muscles with breathing, tachycardia, and possibly cyanosis (Capriotti & Frizzell, 2016). This client fit a lot of the criteria for the signs and symptoms of this illness. This client was tachycardic, tachypnea, short of breath, fatigue, and lethargic. This client was also within the 48-hour mark of a previous hospital stay for muscle weakness, and a left lower foot pressure ulcer.

Tachycardia, tachypnea, increased respirations, and low oxygen saturation is expected vital signs for pneumonia (Capriotti & Frizzell, 2016). This client was tachypnea on admission, and respirations were increased on admission. The vital signs that were recorded today are within the normal limits because the client was getting discharged today after over a week in the hospital. Some expected lab findings suggest a bacterial or viral infection on the CBC with differential (Capriotti & Frizzell, 2016). ABG and pulse oximetry will indicate low oxygenation (Capriotti & Frizzle, 2016). The client's sputum culture and sensitivity can exhibit the organism and antibiotic susceptibility (Capriotti & Frizzell, 2016). This client's CBC showed elevated monocytes and white blood cells, indicating an infection within the body. The client's ABG and pulse oxygenation were compatible with low oxygenation on admission. This client's sputum culture came back negative; however, this is likely because a true sputum culture was not obtained. If the sputum culture has too much saliva in the specimen, it can show negative results (Capriotti & Frizzell, 2016).

Diagnostic testing for this illness is mainly done with a Chest X-ray (Capriotti & Frizzell, 2016). The chest X-ray is most important for diagnosing pneumonia because it will give you a visualization of the opacities on the lungs (Capriotti & Frizzell, 2016). Along with the chest X-ray, the client's CBC with differential will suggest bacterial or viral infection (Capriotti &

Frizzell, 2016). The client's ABG and vital signs will also help diagnose because it will measure the acidity levels of oxygen and carbon dioxide in the blood (Capriotti & Frizzell, 2016).

When treating this disease, the patient's antibiotic therapy and oxygenation are vital priorities (Capriotti & Frizzle, 2016). Antibiotic therapy will kill the bacteria-causing agent, and supplying oxygen to the client will allow the client to breathe easier and not use so much energy to breathe. Fowler positioning of the client and nasal cannula oxygenation are recommended (Capriotti & Frizzell, 2016). The client may need IV fluids to help dehydration, and for the elderly, it is recommended to get the vaccine if they are eligible (Capriotti & Frizzell, 2016).

Pathophysiology References (2) (APA):

Mayo Clinic. (2018). *Pneumonia - Symptoms and Causes*. Mayo Clinic. www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204.

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: introductory concepts and clinical perspectives.* F.A. Davis Company.

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.28-5.56**	**3.96**	**2.96**	**Client's RBC count is low due to client's diagnosis of Anemia (Balentine & Nabili, 2016).**
Hgb	**13.0-17.0**	**10.4**	**8.5**	**Client's hgb is low due to low RBC count from client's diagnosis of Anemia (Balentine & Nabili, 2016).**
Hct	**38.-148.9**	**31.3**	**25.4**	**Client's hct is low due to low RBC**

				count and from client's diagnosis of Anemia (Balentine & Nabili, 2016).
Platelets	**149-393**	**350**	**364**	
WBC	**4.0-11.7**	**10.3**	**13.5**	**Client's WBC is elevated due to diagnosis of Pneumonia and WBC's are increased with infections (Mayo Clinic, 2020).**
Neutrophils	**45.3-79.0**	**73.4**	**70.7**	
Lymphocytes	**11.8-45.9**	**14.6**	**14.7**	
Monocytes	**4.4-12.0**	**10.4**	**12.9**	**Client's Monocytes are elevated due to client fighting off the pneumonia infection in his lungs (Pietrangelo, 2019)**
Eosinophils	**0.0-6.3**	**0.9**	**1.2**	
Bands	**0.0-5.0**	**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**	**136**	**136**	
K+	**3.5-5.1**	**3.8**	**4.4**	
Cl-	**98-107**	**102**	**100**	
CO2	**21-31**	**26**	**30**	
Glucose	**74-109**	**107**	**83**	
BUN	**7-25**	**21**	**12**	
Creatinine	**0.70-1.30**	**0.42**	**0.32**	**Client's creatinine is low due to client's medical history of muscle weakness and creatinine goes off of normal muscle metabolism of the client (Higuera, 2017).**
Albumin	**3.5-5.2**	**3.6**	**3.5**	

Calcium	**8.6-10.3**	**8.3**	**7.8**	**Client's calcium level is low do the hormone disorder caused by the client's hypothyroidism (Khan, 2018).**
Mag	**1.6-2.4**	**N/A**	**N/A**	
Phosphate	**3.0-4.5**	**N/A**	**N/A**	
Bilirubin	**0.3-1.0**	**0.3**	**0.3**	
Alk Phos	**34-107**	**47**	**50**	
AST	**13-39**	**16**	**16**	
ALT	**7-52**	**10**	**8**	
Amylase	**30-222**	**N/A**	**N/A**	
Lipase	**11-82**	**N/A**	**N/A**	
Lactic Acid	**0.5-2.0**	**N/A**	**N/A**	
Troponin	**0.0-0.03**	**N/A**	**N/A**	
CK-MB	**0.60-6.30**	**1.01**	**N/A**	
Total CK	**30-223**	**N/A**	**N/A**	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
INR	**0.86-1.14**	**1.09**	**N/A**	
PT	**11.9-15.0**	**14.3**	**N/A**	
PTT	**22.6-35.3**	**34.6**	**N/A**	
D-Dimer	**0.00-0.62**	**0.54**	**N/A**	

BNP	**0-100**	**24**	**N/A**	
HDL	**>55**	**N/A**	**N/A**	
LDL	**<130**	**N/A**	**N/A**	
Cholesterol	**<200**	**N/A**	**N/A**	
Triglycerides	**35-135**	**N/A**	**N/A**	
Hgb A1c	**4-5.9**	**N/A**	**N/A**	
TSH	**0.5-5.33**	**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	**Yellow, clear**	**Yellow/ clear**	**N/A**	
pH	**5.0-8.0**	**7.5**	**N/A**	
Specific Gravity	**1.005-1.034**	**1.030**	**N/A**	
Glucose	**Normal**	**Normal**	**N/A**	
Protein	**Negative**	**Negative**	**N/A**	
Ketones	**Negative**	**Negative**	**N/A**	
WBC	**<5**	**N/A**	**N/A**	
RBC	**0-4**	**N/A**	**N/A**	
Leukoesterase	**Negative**	**Negative**	**N/A**	

Arterial Blood Gas 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
pH	**7.35-7.45**	**7.41**	**N/A**	
PaO2	**80-100**	**56.0**	**N/A**	**Client's PaO2 is low from client's pulmonary issues from the pneumonia causing anoxia (Gossman et al., 2019).**
PaCO2	**35-45**	**40.0**	**N/A**	
HCO3	**22-26**	**24.9**	**N/A**	
SaO2	**60-75**	**58**	**N/A**	**Client's SaO2 is low due to client suffering from hypoxia from shortness of breath by the pneumonia (Gossman et al., 2019).**

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	**Negative**	**Negative**	**N/A**	
Blood Culture	**Negative**	**Negative**	**N/A**	
Sputum Culture	**Negative**	**Negative**	**N/A**	
Stool Culture	**Negative**	**N/A**	**N/A**	

Lab Correlations Reference (1) (APA):

Balentine, J., & S. Nabili, MD, MPH. (2016). “Anemia Types, Treatment, Symptoms & Cause.” *MedicineNet*, www.medicinenet.com/anemia/article.htm.

Gossman, W, et al. (2019). “Anoxia (Hypoxic Hypoxia).” *Nih.gov*. www.ncbi.nlm.nih.gov/books/NBK482316/.

Higuera, V. (2017). “Low Creatinine: Causes, Symptoms, Treatments.” *Healthline.* www.healthline.com/health/low-creatinine#:~:text=Symptoms%20and%20causes%20of%20low%20creatinine&text=A%20muscle%20disease%2C%20such%20as.

Khan, A. (2018). “Hypocalcemia (Calcium Deficiency Disease).” *Healthline*, Healthline Media. www.healthline.com/health/calcium-deficiency-disease#causes.

Mayo Clinic. (2020). “High White Blood Cell Count Causes.” *Mayo Clinic*. www.mayoclinic.org/symptoms/high-white-blood-cell-count/basics/causes/sym-20050611#:~:text=A%20high%20white%20blood%20cell.

Pietrangelo, A. (2019). “Monocytes High: What Does It Mean If Monocytes Are Elevated?” *Healthline*. www.healthline.com/health/monocytes-high#:~:text=When%20your%20monocyte%20level%20is.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): & Diagnostic Test Correlation (5 points):

EKG: Client received an EKG in the emergency room which showed Normal Sinus Rhythm. This was done to assess the client’s heart because a client who is experiencing SOB can be experiencing it from a pulmonary embolism or other heart issues, which is why it is important to have an EKG on file for reference. The findings for this test were NSR.

Chest X-ray: Client expressed concerns with the struggling to breathe. The doctor ordered a chest X-ray to visualize his lungs for respiratory conditions, CHF conditions, and more (Hinkle & Cheever, 2018). The findings for this indicate normal heart size, mild retrocardiac and peripheral left midlung airspace disease. There was no visualization or a pneumothorax or pleural effusion. The client showed mild retrocardiac and peripheral left midlung opacity concerning for pneumonia.

CT Angio (Chest Pulmonary): This test was done to assess the client for pulmonary embolism because it assesses the arteries of the client. This was done because the client was having shortness of breath. The findings of this indicate that in the lungs show some mild dependent atelectasis in both lungs. The plural spaces show there is some small right pleural effusion and a tiny left pleural effusion. There is no signs of pulmonary embolism.

Diagnostic Test Reference (1) (APA):

Hinkle, J. L. & Cheever, K. H. (2018). Brunner & Suddarth's textbook of medical-surgical nursing (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

Current Medications (10 points, 1 point per completed med)
10 different medications must be completed

Home Medications (5 required)

Brand/Generic	**Acetaminophen/ Tylenol**	**Metoprolol/ Lopresor (CAN)**	**Tramadol/ ConZip**	**Olanzapine/ Zydis**	**Divalproex sodium/ Depakote**
Dose	**32.5mg**	**25mg**	**50mg**	**10mg**	**500mg**
Frequency	**PRN**	**Daily**	**PRN**	**HS**	**TID**
Route	**PO**	**PO**	**PO**	**PO**	**PO**

Classification	**Antipyretic/ nonopioid analgesic (Nonsalicylate, para-aminophenol derivative)**	**Antihypertensive (Beta-Blocker)**	**Opioid Analgesic**	**Antipsychotic**	**Anticonvulsant (Carboxylic acid derivative)**
Mechanism of Action	**Inhibits the enzyme cyclooxygenase blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.**	**Inhibits stimulation of beta 1 receptor sites, located mainly in the heart, resulting in decreased cardiac excitability, cardiac output, and myocardial oxygen demand. These effects help relieve angina, minimize cardiac tissue damage from myocardial infarction, and help relieve symptoms of heart failure. This drug also helps with reducing BP by decreasing renal release**	**Binds with mu receptors and inhibits the reuptake of norepinephrine and serotonin, which may account for tramadol's analgesic effect.**	**May achieve antipsychotic effects by antagonizing dopamine and serotonin receptors. Anticholinergic effects may result from competitive binding to and antagonism or the muscarinic receptors M1 through M2.**	**May decrease seizure activity by blocking reuptake of gamma-aminobutyric acid, the most common inhibitory neurotransmitter in the brain. GABA suppresses the rapid firing of neurons by inhibiting voltage-sensitive sodium channels.**

		of renin			
Reason Client Taking	**To relieve client's mild or moderate pain**	**Because client has Hypertension**	**To relieve chronic pain from client's past traumatic injuries and to help manage the severe pain he is in now.**	**Client struggles with affective personality disorder**	**This client is taking this medication because this client is epileptic and this medication helps to control the epilepsy.**
Contraindications (2)	**Hypersensitivity to acetaminophen or its components, severe hepatic impairment**	**Acute HF, pulse less than 45 beats per minute**	**Alcohol intoxication, hypnotics**	**Bone marrow depression, hepatic disfunction**	**Hepatic impairment, mitochondrial disease caused by POLG.**
Side Effects/Adverse Reactions (2)	**Hypotension, hepatoxicity**	**Cardiac arrest, hepatitis**	**Seizures, suicidal ideation**	**Venous thromboembolic events, hepatitis**	**Thrombocytopenia, hyponatremia**
Nursing Considerations (2)	**Use cautiously in patients with hepatic impairment, Know that before and during long-term therapy including parenteral therapy liver function tests should be done, Do not confuse dose in mg**	**Expect to taper dosage over 1 to 2 weeks when the dug is discontinued; If dosage exceeds 400mg daily, the patient should be monitored for bronchospasm and dyspnea because it**	**Be aware that tramadol shouldn't be given to patients with a history of anaphylactoid reactions to codeine or other opioids., Avoid giving tramadol to patients with acute**	**Monitor client's blood pressure routinely because this may cause hypotension, assess daily weight to detect fluid retention or metabolic changes.**	**Give with food to minimize GI affects, Be aware that drug may alter urine ketone test and thyroid function tests.**

	with a dose in mL when preparing administration.	**completely blocks beta 2 receptors.**	**abdominal conditions because it may mask evidence and disrupt assessment of the abdomen.**		
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	**Liver function tests should be done to ensure the client can handle long term use of acetaminophen.**	**It is vital to assess the client's BP to ensure the client is not too low and if it is it indicates we cannot give metoprolol. It is also important to assess the clients heart and heart rate when giving metoprolol.**	**Monitor electrolyte imbalances before administration as tramadol can affect potassium levels.**	**It is important to monitor hepatic levels before administration of this drug because the drug is hepatotoxic. It also important to make sure the client is not hypotensive before administration because this drug can cause low blood pressure.**	**Monitor liver function tests before administration as this can be hard on the client's liver.**
Client Teaching needs (2)	**Tell the patient that tablets may be crushed or swallowed whole, Teach patient to recognize signs of hepatotoxicity**	**Advise patient to notify prescriber if pulse rate falls before 60, urge diabetic patients to check their glucose often during therapy**	**Instruct patient prescribed extended-release form to swallow tablet whole and not to chew, crush, or split**	**Avoid alcohol and smoking during drug therapy, change position slowly to minimize orthostatic hypotension.**	**Avoid alcohol during therapy, urge family to watch patient closely for signs of suicidal tendencies as this drug may cause suicidal thoughts.**

			tablet., Caution patient not to stop tramadol abruptly.		

Hospital Medications (5 required)

Brand/Generic	**Ferrous Sulfate/ Mol-Iron**	**Enoxaparin/ Lovenox**	**Calcium Carbonate/ TUMS**	**Atorvastatin/ Lipitor**	**Amlodipine / Norvasc**
Dose	**300mg**	**40mg**	**500mg**	**20mg**	**5mg**
Frequency	**Daily**	**Daily**	**TID**	**HS**	**Daily**
Route	**PO (liquid)**	**Sub Q**	**PO**	**PO**	**PO**
Classification	**Nutritional supplement**	**Anticoagulant (Low molecular-weight heparin)**	**Antacid, antihypermagnesemic**	**Antihyperlipidemic**	**Antianginal, antihypertensive (Calcium Channel blocker)**
Mechanism of Action	**Acts to normalize RBC production by binding with hemoglobin or by being oxidized and stored as hemosiderin or**	**Potentiates the action of antithrombin III and coagulation inhibitor. By binding with**	**Increase levels of intracellular and extracellular calcium, which is needed to maintain homeostasis, especially in the nervous and musculoskeleta**	**Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in**	**Bind to dihydropyridine and no dihydropyridine cell membrane receptor sites on myocardial and vascular**

	aggregated ferritin in reticuloendothelial helical cells of the bone marrow, liver, and spleen. Iron is needed for catecholamine e e metabolism and normal neutrophil function.	**antithrombin II, lovenox rapidly bind with and inactivates slotting factors.**	**l systems. Also plays a role in normal cardiac and renal function, respiration, coagulation, and cell membrane and capillary permeability. Helps regulate the release and storage of neurotransmitters and hormones. Oral forms also neutralize or buffer stomach acid to relieve discomfort caused by hyperacidity.**	**the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown.**	**smooth-muscle cells and inhibits influx of extracellular calcium iron across slow calcium channels. This decreases intracellular calcium level, inhibiting smooth-muscle cell contractions and relaxing coronary and vascular smooth muscles, decreasing peripheral vascular resistance, and reducing systolic and diastolic blood pressure. Decreased peripheral vascular resistance also decreases myocardial workload, oxygen demand,**

					and possibly angina. Also, by inhibiting coronary artery muscle cell contractions and restoring blood flow, drug may relieve Prinzmetal's angina.
Reason Client Taking	**Because client has anemia**	**Because client is immobile and at risk for blood clots and lovenox helps to reduce the risk of developing DVT's**	**This client is taking this medication because he is low on calcium as evidenced by muscle weakness.**	**This is used to treat high cholesterol and to reduce the risk of stroke, heart attack, or other heart complication. This client struggles with traumatic brain injuries which put him at high risk for stroke.**	**To control the client's hypertension**
Contraindications (2)	**Hemochromatosis, hemolytic anemias**	**Active major bleeding; HIT**	**Hypercalcemia, hypophosphatemia**	**Active Hepatic disease, breastfeeding**	**Hypersensitivity to amlodipine or its components**
Side Effects/Adverse Reactions (2)	**Hypotension, hemolysis**	**CVA, Hemorrhage**	**Hypotension, Hypercalcemia**	**Hypoglycemia, hepatic failure**	**Arrhythmias, Hypotension**
Nursing	**Give with a**	**Do not**	**Warm solution**	**Monitor DM**	**Use**

Considerations (2)	**full glass of juice or water; to maximize absorption give 2 hour before meals and 2 hours after meals**	**give by IM injection; Expect to give this drug with aspirin with unstable angina**	**to room temperature before parenteral administration. , Store at room temperature and protect from heat, moisture, and direct light. Don't freeze.**	**patient's blood glucose levels because it can affect blood glucose control; expect to measure lipid levels 2-4 weeks after therapy starts**	**amlodipine cautiously in patients with heart block, heart failure, impaired renal function, hepatic disorder, or severe aortic stenosis., Monitor blood pressure while adjusting dosage, especially in patients with heart failure or severe aortic stenosis because symptomatic hypertension may occur.**
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	**Assess for hypertension before giving because initially this drug can cause hypertension**	**Watch closely for bleeding and check serum potassium levels for elevation, especially in**	**Monitor calcium levels to ensure you are not causing calcium toxicity.**	**Expect liver function tests to be performed before therapy starts and thereafter as clinically necessary. Monitor blood glucose**	**Monitor AST ALT labs and liver enzymes because this medication is hepatotoxic.**

		patients with renal impairment.		**levels in patients who have DM.**	
Client Teaching needs (2)	**Tell client eat chicken, fish, lean red meat, and turkey as well as vitamin C rich foods; Avoid foods that impair iron absorption such as milk**	**Tell patient not to rub the site after giving the injection to minimize bruising; review safe handling and disposal or syringes and needles.**	**Urge patient to chew chewable tablets thoroughly before swallowing and to drink a glass of water afterward., Tell patient to shake bottle well before each use if suspension form is prescribed**	**Ensure the client knows it is used as an adjunct to-not a substitute for- low cholesterol diet, Take drug at the same time each day to maintain its effects.**	**Tell patient to take missed dose as soon as remembered and next dose in 24 hours., Suggest taking amlodipine with food to reduce GI upset.**

Medications Reference (1) (APA):

Calcium Carbonate: MedlinePlus Drug Information. (2016). *Medlineplus.gov*. medlineplus.gov/druginfo/meds/a601032.html#:~:text=Calcium%20carbonate%20is%20a%20dietary.

Jones & Bartlett Learning. (2019). *2019 nurse's drug handbook (18th ed.)*. Jones & Bartlett Publishers.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** A&O X1 **Orientation:** Client is orientated to himself	**Client was awake and orientated to himself. Client is not orientated to location, time, or situation. Client is A&OX1. Client responded**

but not to location, time or situation. A&OX1 **Distress:** Client is in a calm, pleasant mood and does not seem to be in a distressed state. **Overall appearance:** Client's overall appearance is well nourished, but client struggles with maintaining postural stance. Client is in a good mood and alert to senses.	**stimuli and was able to tell me his name and birthdate. Client did not show signs of distress but struggles with postural stance. Repositioning needs done frequently to maintain skin integrity and to keep the client comfortable.**
INTEGUMENTARY (2 points): **Skin color:** Pink, White, normal for race **Character:** dry and intact **Temperature:** warm **Turgor:** Elastic **Rashes:** none **Bruises:** none **Wounds:** Left Lower foot pressure ulcer and right inner knee pressure ulcer **Braden Score: 9** **Drains present: Y☐ N ☒** **Type:**	**Braden Score: 9** **This client's skin color was pink/white and normal for race. Client's skin is warm, dry, and intact. Client's skin turgor is elastic, showing adequate hydration. Client had no rashes or bruises. Client has two pressure ulcers. One ulcer is on the client's right inner knee and the other is on the lower left foot. Client has no drains present.**
HEENT (1 point): **Head/Neck:** Trachea is midline, oral mucosa is moist and intact. Head is symmetrical and normocephalic. Uvula is midline and no tonsil exudate noted. Tongue is pink and moist. **Ears:** Tympanic membranes are noted pearly silver and no abnormal drainage was noted bilaterally. Both ears are symmetrical with no abnormalities in the formation of the ears. **Eyes:** PERRLA, sclera was white and there were no conjunctival inflammation or abnormalities. Client's eyes were symmetrical bilaterally. **Nose:** Septum is midline. No epistaxis. **Teeth:** Client does not have any dentures. Client's oral mucosa is pink and moist. Client's teeth were slightly cracked and client is missing majority of his teeth.	**This client's head is normocephalic. Trachea is midline with oral mucosa and tongue being pink, moist and intact. Uvula is midline and tonsil exudate is not noted. Client's tympanic membrane (TM) was pearly silver bilaterally and no abnormal drainage bilaterally. PERRLA was noted with sclera appearing white bilaterally with no conjunctival inflammation or drainage, bilaterally. Nasal septum is midline with no epistaxis noted. Client's teeth were slightly cracked with majority of client's teeth missing or pulled previously.**
CARDIOVASCULAR (2 points): **Heart sounds:** S1, S2, hear sounds are auscultated. **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** NSR	**Clients hearts sounds were auscultated and S1 and S2 Normal Sinus Rhythm was noted. There were no heart sound abnormalities. Client had 3+ bilaterally radial, pedal, and popliteal pulses. Client had a less than three**

Peripheral Pulses: +3 bilaterally for radial pulse and +3 bilaterally for popliteal and pedal pulses. **Capillary refill:** <3 seconds **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**second capillary refill with no neck vein distention or edema located.**
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Clients respirations were equal bilaterally, posterior and Anterior in all lobes. There were no wheezes noted but lung sounds were diminished on the left side due to left sided pneumonia. Client does not used oxygen currently and is doing well on room air. Client does not use CPAP or BIPAP.**
GASTROINTESTINAL (2 points): **Diet at home:** Puréed diet **Current Diet:** Pureed Diet **Height:** 175.26cm **Weight:** 57.3kg **Auscultation Bowel sounds:** Active in all 4 Quadrants, slightly hypoactive. **Last BM:** 04/04/21 **Palpation: Pain, Mass etc.:** No pain or masses noted with palpation. Soft and non-tender **Inspection:** **Distention:** none **Incisions:** none **Scars:** Left wrist scar from surgery and on his head along the right temporal side. **Drains:** none **Wounds:** Left lower foot pressure ulcer and right inner knee pressure ulcer **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Client is consistently on puréed diet both at Arcola health care (home) and currently at the hospital. Client's bowel sounds are active in all four quadrants but slightly hypoactive. The clients last bowel movement was on 04/04/21. Client reported no pain with palpation and there were no masses noted. Abdomen is soft and non-tender. There is no abdominal distension or incisions. Client has two scars with one being on left wrist and one along the right temporal side of his head. There are no drains present. Client does not have any ostomy, NG tube or feeding tubes present.**
GENITOURINARY (2 Points): **Color:** Yellow **Character:** Clear **Quantity of urine:** Client's urine is not being measured. **Pain with urination: Y ☐ N ☒**	**Client is voiding without difficulty, but client is incontinent. Client's urine is yellow and clear. Quantity of urine not being measured, however there is no pain with urination. Genitals are normal with no abnormalities. There is no catheter.**

Dialysis: Y ☐ N ☒ **Inspection of genitals:** No genital abnormalities noted **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL (2 points): **Neurovascular status:** Radial pulse is 3+ bilaterally and pedal pulse is 3+ bilaterally. Skin is warm and intact bilaterally in upper and lower extremities. Client has slight sensory limitations but skin is pale, pink and not cyanotic. **ROM:** Client does not demonstrate functional active range of motion. Client needs passive range of motion preformed frequently in upper and lower extremities to prevent contractions. **Supportive devices:** Hoyer lift, moon boots **Strength:** 2/5 strength bilaterally in upper and lower extremities. Client is able to raise head but cannot reposition well. **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 70 **Activity/Mobility Status:** Hoyer lift **Independent (up ad lib) ☐ No** **Needs assistance with equipment ☐ yes** **Needs support to stand and walk☐ yes**	**Fall Score: 70** **Client is immobile and uses a Hoyer lift to get around. Client is not able to perform ROM actively so passive ROM is done on him to prevent contractures. Client is not able to perform activities of daily living. Client showed equal strength bilaterally in upper and lower extremities. Client is a Hoyer lift.**
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation: A&OX1** **Mental Status:** Mental status is hard to assess due to client being a poor historian, however this client is alert to himself. **Speech:** client speech is delayed responding and very soft spoken. Speech is not slurred. **Sensory:** Slightly limited **LOC:** Alert to himself	.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** Not able to assess due	**Client was not able to express coping methods or personal family data due to AMS and being a poor historian. The TV was found to bring**

to client being a poor historian. Client did show signs of enjoyment when watching TV. TV seemed to relax him. **Developmental level:** Not able to assess due to client being a poor historian. **Religion & what it means to pt.:** Presbyterian **Personal/Family Data (Think about home environment, family structure, and available family support):**	**the client joy and calm him. Client is Presbyterian.**

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1150	**103**	**116/70**	**18 resp**	**37.0**	**98%**
1430	**98**	**116/72**	**18 resp**	**37.0**	**97%**

Vital Sign Trends: This client's vitals remained stable during my time of care. This client has a past medical history of hypertension and his blood pressure remained around 116/70. With this information, we can conclude that the Metoprolol is working and maintaining good blood pressure for this client. This client came in with complained of shortness of breath and now both his oxygen and respiratory rate have improved and are within the normal ranges. With this information, we can conclude that the client is improving with the treatment here at the hospital. The client's baseline heartrate was slightly tachycardic at the 1150 timespan, however at 1430 we see that it has went down but still on the tachycardic side. This can likely be from the client being moved around by staff as we were getting him ready to be discharged. The client does not have a temperature.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1150	**FLACC**	**Left lower foot pressure ulcer**	**4/10**	**Due to client being a poor historian, the client was not able to describe the pain.**	**The client was given acetaminophen to help with the pain as ordered by the doctor. The client was also repositioned and the client's moon boots were repositioned to take the pressure off of the foot.**
1150	**FLACC**	**N/A there was no pain**	**0/10**	**N/A there was no pain**	**N/A client was not in pain, however client did not seem to be in a comfortable position so I repositioned the client.**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV:** right upper arm **Date on IV:** 04/02/21 **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** none **IV dressing assessment:** Clean, dry, and intact	Client has a 20G saline lock IV in his right upper arm that was placed on the second of March. When assessing the IV there were no signs of erythema or drainage noted. The IV was clean, dry and intact.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

710mL	**2mL**

Nursing Care

Summary of Care (2 points)

Overview of care: This student preformed a head-to-toe assessment on the client, assisted with repositioning, assisted with getting his belongings together for discharge, changed the left lower foot dressing on his pressure ulcer, took vital signs and did pain assessments, and helped transfer the client. There were two sets of vitals and pain assessments done on this client during my care.

Procedures/testing done: During my time to care for this client there were no procedures or testing done on this client while I was at clinical. Before clinical there we an EKG, two chest x-rays and a Cat-scan with Angio. The Chest x-ray's and Cat-scan were both compliant with pneumonia which was acquired from the client's past hospital stay.

Complaints/Issues: Client was a poor historian and was not able to verbalize pain or possible issues he may have been having, however frequent assessments were done on this client and according to the FLACC scale, the client did not show facial signs of discomfort or clinching of the hands or feet to show pain. This client was found to not have any pain or discomfort.

Vital signs (stable/unstable): This client's vital signs were stable with slight tachycardia, likely elevated due to repositioning the client. The clients blood pressure is around 116/70, which indicates that the metoprolol is effective in controlling his hypertension. This client's respirations and oxygen are both within normal limits and the client does not struggle with bleeding.

Tolerating diet, activity, etc.: The client's diet is on a puréed diet both at the hospital and at Arcola Health Care. This client is immobile and cannot tolerate activities well. This client is a full assist.

Physician notifications: During my time of care, the client was meeting all standards and there were no changes in the client's condition. The physician put in discharge orders for this client during my time of care.

Future plans for patient: The future plans for this client is to improve moon boots and lessen the client's risk for pressure ulcers at the nursing home. This client is to be discharged back to Arcola Nursing home today at 1445.

Discharge Planning (2 points)

Discharge location: Arcola Nursing Home long term care

Home health needs (if applicable): This client will be discharged back to the skill nursing facility where all care will be provided.

Equipment needs (if applicable): This client resides in a skill nursing facility. This facility has all equipment needed for the care of this client.

Follow up plan: After discharge, this client should follow up with primary provider to ensure pneumonia is gone and respiratory assessments are normal.

Education needs: Due to client being a poor historian and client living at a skilled nursing facility, the teaching will be relayed to the nurses at the skilled nursing facility. The nurses should be sure to turn the client every 2 hours or more to decrease pressure injury. It is important to ensure the client is getting out of bed and in his wheelchair as much as possible to improve his respiratory stance.

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

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. Ineffective airway clearance related increased sputum production as evidenced by client's wet cough.	This nursing diagnosis was chosen because the client was struggling to breathe and cough up secretions which put the client at risk for aspiration of thick secretions from the pneumonia.	**1.**Elevate the head of bed and change positions of the client frequently to increase chest expansion and expectoration of secretions. **2.** Administer oxygen as prescribed by doctor,.	The patient responded well to these interventions. Moving the client frequently to improve chest expansion caused the oxygen saturation to be increased. Oxygen saturation also increased with oxygen administration as ordered by the doctor.
2. Impaired Gas exchanged related to collection of mucus in airways as evidenced by client's dyspnea and tachycardia on admission.	This nursing diagnosis was chosen because the was struggling to breathe on admission and had a wet cough.	**1.** Assess color of skin, nail beds and mucus membranes for signs of cyanosis. **2.**Monitor ABG levels and pulse oximetry that would indicate respiratory distress or concern.	The client responded well to these nursing interventions. The color of the client's nail beds, skin color, and mucus membranes are not cyanotic which indicate the client's condition is not worsening. The goal for this client is to improve breathing, which the client did start to improve the breathing.
3. Acute pain related to persistent coughing as evidenced by client moaning and facial grimacing.	This nursing diagnosis was chosen because the client was struggling to breathe and cough up wet secretions and client began to moan and show facial grimacing.	**1.** Monitor vitals signs for changes in heart rate and blood pressure that could indicate signs of pain. **2**Provide non-pharmacological comfort measures such as watching TV for this client	The client responded well to these nursing interventions. The client's vitals were slightly elevated, however after the TV was turned on the client seemed to be more relaxed. The goal for this client is to reduce the pain and promote comfort measures. The outcome of this client is pain

		because TV helps to relax this client.	reduction.
4. Activity intolerance related to general weakness as evidenced by dyspnea with small exertion.	This nursing diagnosis was chosen because the client was very short of breath with small exertional activities such as repositioning.	**1.** Provide a quiet environment and limit visitors during periods of rest to reduce stress and stimulation that could worsen the exhaustion phase. **2.** Pace activity and rest periods for this client.	The client responded well to these nursing interventions. The client is immobile but with repositioning and transferring with the Hoyer, the client would become SOB. After taking the time to transfer and reposition the client, the client does not become so exhausted. The outcome of this is that taking time with transitions will improve the client's activity intolerance.

Other References (APA):

Vera, M. (2017). "Pneumonia Nursing Care Plans: 10 Nursing Diagnosis." *Nurseslabs.* nurseslabs.com/pneumonia-nursing-care-plans/2/.

Concept Map (20 Points):

Subjective Data

-Client is SOB
-Client has no pain
-Client is exhausted from exerction

Objective Data

Client has labored breathing
Client is slightly tachycardic
Client Chest x-ray shows left lung opacity
Client's lung sounds are diminished on the left side

Patient Information

Client is a 64-year-old- white male presenting with hospital acquired pneumonia. Client presents with complaints of a wet cough and being more lethargic than normal. Client is having dyspnea but denies any chest pain. Client has AMS and is a poor historian.

Nursing Diagnosis/Outcomes

Ineffective airway clearance related increased sputum production as evidenced by client's wet cough.
The patient responded well to these interventions. Moving the client frequently to improve chest expansion caused the oxygen saturation to be increased. Oxygen saturation also increased with oxygen administration as ordered by the doctor.
Impaired Gas exchanged related to collection of mucus in airways as evidenced by client's dyspnea and tachycardia on admission.
The client responded well to these nursing interventions. The color of the client's nail beds, skin color, and mucus membranes are not cyanotic which indicate the client's condition is not worsening. The goal for this client is to improve breathing, which the client did start to improve the breathing.
Acute pain related to persistent coughing as evidenced by client moaning and facial grimacing.
The client responded well to these nursing interventions. The client's vitals were slightly elevated, however after the TV was turned on the client seemed to be more relaxed. The goal for this client is to reduce the pain and promote comfort measures. The outcome of this client is pain reduction.
Activity intolerance related to general weakness as evidenced by dyspnea with small exertion.
After taking the time to transfer and reposition the client, the client does not become so exhausted. The outcome of this is that taking time with transitions will improve the client's activity intolerance.

Nursing Interventions

1.Elevate the head of bed and change positions of the client frequently to increase chest expansion and expectoration of secretions.

2. Administer oxygen as prescribed by doctor,.
1. Assess color of skin, nail beds and mucus membranes for signs of cyanosis.

2.Monitor ABG levels and pulse oximetry that would indicate respiratory distress or concern.
1. Monitor vitals signs for changes in heart rate and blood pressure that could indicate signs of pain.

2Provide non-pharmacological comfort measures such as watching TV for this client because TV helps to relax this client.
1. Provide a quiet environment and limit visitors during periods of rest to reduce stress and stimulation that could worsen the exhaustion phase.

2. Pace activity and rest periods for this client.