N441 Care Plan

Lakeview College of Nursing

Bryson Cutts

Demographics (3 points)

Date of Admission 10/11/2021	**Patient Initials** R.L.C.	**Age** 93 years old	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Widow	**Allergies** Ciprofloxacin (reaction N/A) Levofloxacin (reaction N/A)
Code Status DNR	**Height** 181.6 cm	**Weight** 104.9 kg	

Medical History (5 Points)

Past Medical History: Atrial fibrillation (AF), congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), hyperlipidemia (HLD), hypertension (HTN), hypothyroidism, spinal stenosis

Past Surgical History: Bronchoscopy with lavage (2021), aorta, hernia, and lung procedure (specifications unavailable), cholecystectomy

Family History: Patient is a poor historian; Cerner did not show any family history.

Social History (tobacco/alcohol/drugs): The patient is a former smoker of 20 years; he smoked 1 pack-per-day. He denies alcohol or recreational drug use, past or present.

Assistive Devices: Walker, reading glasses

Living Situation: Home alone

Education Level: High School

Admission Assessment

Chief Complaint (2 points): Cough & shortness of breath

History of present Illness (10 points):

A 93-year-old male admitted to the hospital on October 11, 2021, had a cough “that would not go away” and shortness of breath following a visit with his provider. The patient experienced a cough that "felt like something was stuck in there (throat).” The patient described his cough as nonproductive and dry. Verbal communication aggravated his cough. The patient also had low back pain described as "dull and achy," separate from his coughing spell, stating a 5/10 on the numeric scale. Any movement made his back hurt; he did not attempt to relieve or treat his back pain. The patient appeared anxious secondary to dyspnea while having an oxygen saturation of 84%. The patient attempted to cough and deep breathe but found no relief. He attempted treatment with his "nebulizer" as soon as the coughing began and found no relief.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): CHF Exacerbation

Secondary Diagnosis (if applicable): Hypoxia

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

This patient has diastolic congestive heart failure (CHF). Many chronic diseases processes lead to CHF, such as hyperlipidemia-related ischemic heart disease, hypertension, and chronic obstructive pulmonary disease (COPD) (Capriotti, 2020). This patient has all three disease processes. These diseases typically cultivate over the years due to a combination of genetics and lifestyle factors such as nutrition, exercise status, and smoking history (Capriotti, 2020). Diastolic CHF involves an inefficiency regarding the myocardium's ability to relax, resulting in inadequate filling of the ventricles (Capriotti, 2020). Furthermore, the poor

ventricular filling creates cardiac output deficient in oxygen to the entire circulatory system, resulting in dysfunction with the body's organs (Capriotti, 2020). CHF differs from general HF; CHF involves retained fluid around the heart, and this fluid circulates throughout the rest of the body (Capriotti, 2020).

The manifestations of CHF that this patient presented with during the clinical period included dyspnea on exertion and orthopnea. At the time of clinical, the majority of the patient's exacerbation signs and symptoms resolved. However, the symptoms he presented with at the time of admission were related to excess fluid volume. For instance, he was hypertensive, tachycardic, dyspneic with crackles, heavier than his baseline weight by 12 kilograms, had bounding radial pulses, and was edematous in his lower extremities. Paroxysmal nocturnal dyspnea, an S_3 gallop, cardiomegaly, and pleural effusions are other manifestations of CHF (Capriotti, 2020). The patient's serum electrolytes became diluted with fluid volume overload, so he was hyponatremic and hypokalemic.

Left ventricular ejection fraction (LVEF), the volume percentage of blood ejected with each contraction, is usually within normal limits in diastolic CHF. An EF below 40% is indicative of systolic CHF (Capriotti, 2020). Another indicator of HF is the brain natriuretic peptide (BNP); levels greater than or equal to 500 equates to HF (Capriotti, 2020). This patient's BNP was 61. As mentioned earlier, diluted serum electrolytes can also point to CHF due to excess fluid volume (Capriotti, 2020). A chest radiograph (CXR), electrocardiogram (EKG), and echocardiogram are all diagnostic imaging tools utilized to aid etiologies of CHF and abnormalities (Capriotti, 2020). The patient's EKGs revealed sinus rhythm, while the CXRs and echocardiogram indicate cardiomegaly and pulmonary congestion. There were other findings;

however, the additional signs were not related to CHF but the patient's multifaceted organ problems.

Treatment for CHF includes a slew of lifestyle modifications, such as incorporating a diet low in cholesterol, saturated fat, and sodium (Capriotti, 2020). Increasing the amount of exercise one does also helps combat CHF. The staple to treatment involves a medication regime involving antihypertensives like beta-blockers and loop diuretics, such as propranolol and furosemide (Jones & Bartlett, 2020). Antihyperlipidemic medications such as atorvastatin, which this patient takes, lower cholesterol-causing atherosclerosis (Jones & Bartlett, 2020). Positive inotropic agents like digoxin and dopamine help increase myocardial contractility, which improves cardiac output. Eventual heart transplantation may be the route taken if patients with CHF are proper candidates. With this patient, his age and his slew of comorbidities deem him an unworthy candidate. This patient received furosemide to remove the excess fluid from his body while also continuing his home medication concoction of HF-type drugs. This patient is at a point in his life where symptom management and hospice are on the horizon, and life-extending interventions are no longer the priority.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

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 (10^6/mcL)	3.80-5.41	3.77	N/A	The patient has a history of anemia (Capriotti, 2020).
Hgb (g/dL)	11.3-15.2	11.2	N/A	The patient has a history of anemia (Capriotti, 2020).
Hct (%)	33.9-45.3	33.7	N/A	The patient has a history of anemia (Capriotti, 2020).
Platelets (K/mcL)	149-393	214	N/A	N/A
WBC (K/mcL)	4.0-11.7	8.3	N/A	N/A
Neutrophils (%)	45.3-79.0	82.8	N/A	The patient had a UTI (Capriotti, 2020)
Lymphocytes (%)	11.8-45.9	9.7	N/A	The patient had a UTI (Capriotti, 2020)
Monocytes (%)	4.4-12.0	6.7	N/A	N/A
Eosinophils (%)	0-6.3	0.4	N/A	N/A
Bands (%)	0-5.1	0.4	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+ (mmol/L)	135-145	133	147	The patient had excess fluid volume on admission, which caused dilutional hyponatremia (Capriotti, 2020). On today's value, the patient's sodium was overcorrected with saline (Capriotti, 2020).
K+ (mmol/L)	3.5-5.1	3.3	4.5	The patient had excess fluid volume on admission, which caused dilutional hypokalemia in addition to him having CKD (Capriotti, 2020).
Cl- (mmol/L)	98-107	94	107	N/A

CO2 (mmol/L)	21-31	30	29	N/A
Glucose (mg/dL)	74-109	104	83	N/A
BUN (mg/dL)	7-25	17	40	The patient has CKD III (Capriotti, 2020).
Creatinine (mg/dL)	0.70-1.30	1.30	1.17	N/A
Albumin (g/dL)	3.5-5.3	3.6	N/A	N/A
Calcium (mg/dL)	8.5-10.3	9.3	9.1	N/A
Magnesium (mg/dL)	1.6-2.5	1.3	N/A	Chronic HTN and CKD have been shown to decrease magnesium levels (Capriotti, 2020).
Phosphate (mg/dL)	2.5-4.5	N/A	N/A	N/A
Bilirubin (mg/dL)	0.3-1.0	0.5	N/A	N/A
Alk Phos (unit/L)	34-104	64	N/A	N/A
AST (U/L)	10-30	20	N/A	N/A
ALT (U/L)	10-40	19	N/A	N/A
Amylase (U/L)	30-110	N/A	N/A	N/A
Lipase (U/L)	0-160	N/A	N/A	N/A
Lactic Acid (mEq/L)	0.5-2.2	N/A	N/A	N/A
Troponin (ng/mL)	0.000-0.030	0.023	N/A	N/A
CK-MB (ng/mL)	0.60-6.30	9.41	N/A	N/A
Total CK (intlU/L)	30-223	189	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	1 (2-3 therapeutic)	N/A	N/A	N/A
PT (seconds)	9.5-11.8 (1.5-2.5 times therapeutic)	N/A	N/A	N/A
PTT (seconds)	30-40 (1.5-2.5 times therapeutic)	N/A	N/A	N/A
D-Dimer (ng/mL)	</= 250	N/A	N/A	N/A
BNP (pg/mL)	<100	61	N/A	N/A
HDL (mg/dL)	>60	N/A	N/A	N/A
LDL (mg/dL)	<130	N/A	N/A	N/A
Cholesterol (mg/dL)	<200	N/A	N/A	N/A
Triglycerides (mg/dL)	<150	N/A	N/A	N/A
Hgb A1c (%)	4-5.6	N/A	N/A	N/A
TSH (mU/L)	0.4-4	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	Pale yellow-deep amber/ clear	Light yellow/clear	Yellow/turbid	The patient has a UTI (Capriotti, 2020)
pH	5-8	5	6	N/A
Specific Gravity	1.005-1.035	1.017	1.015	N/A
Glucose	Negative	Negative	Negative	N/A
Protein	Negative	Negative	Negative	N/A

Ketones	Negative	Negative	Negative	N/A
WBC	Negative	Positive	Positive	The patient has a UTI, so pyuria is expected (Capriotti, 2020).
RBC	Negative	Negative	Negative	N/A
Leukoesterase	0-5	2+	500	The patient has a UTI, so pyuria is expected (Capriotti, 2020).

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	7.28	7.42	The patient retained CO2, which causes acidosis (Capriotti, 2020).
PaO2 (mm Hg)	80-100	56.5	58.9	Atelectasis and PNU reduce gas exchange, causing hypoxemia (Capriotti, 2020).
PaCO2 (mm Hg)	35-45	79.1	52.7	Atelectasis and PNU reduce gas exchange, causing hypercapnia (Capriotti, 2020).
HCO3 (mEq/L)	22-26	31.2	32.1	The patient's kidneys are attempting to buffer his acidotic state (Capriotti, 2020).
SaO2 (%)	94-100	88.2	90.1	The patient's atelectasis and PNU contribute to ineffective gas exchange, causing hypoxia (Capriotti, 2020).

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 (10/23/21)	Explanation of Findings
Urine Culture	Negative	N/A	Positive	*Proteus mirabilis* Indwelling urinary catheters increase the risk of acquiring a UTI (Capriotti, 2020).
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A

Stool Culture	Negative	N/A	N/A	N/A
Bronchial Culture	Negative	N/A	Positive	*Klebsiella oxytoca* Atelectasis, CHF, and current immobility reduce the respiratory system's ability to expectorate secretions and deep breathing to promote gas exchange, which places the patient at risk for obtaining PNU (Capriotti, 2020).

Lab Correlations Reference (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Sarah Bush Lincoln Health Reference Guide. (2021). *Cerner*. https://www.sarahbush.org

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

10/11: Electrocardiogram (EKG), chest radiograph (CXR), magnetic resonance imagining (MRI) lumbar spine

10/12: Echocardiogram (Echo) with contrast), computerized tomography angiography (CTA) chest with contrast, 2 CXRs

10/22: CT chest without contrast

10/23: CXR (pre-bronchoscopy), EKG

10/25: CXR (post-bronchoscopy)

Diagnostic Test Correlation (5 points):

EKG: NSR with first degree AV block

CXR: Cardiomegaly, mild pulmonary congestion

MRI: Deformity compression of L1, edema between T12-L1 and L1-L2 vertebral spaces, lumbar spondylosis

ECHO: Unremarkable

CTA Chest: Pleural-parenchymal disease at the left lung base, pulmonary HTN, FVO with increasing pulmonary congestion

CXR (2): Increasing basilar left midlung opacities may be related to PNU in part layer pleural effusion with atelectasis

CT Chest: Complete left lung atelectasis with right lower lobe atelectasis with a mucus plug, trace bilateral pleural effusion, coronary artery atherosclerosis

CXR (pre-bronchoscopy): Left lung consolidation and atelectasis

EKG: NSR

CXR (post-bronchoscopy): Increased aeration of the left wall with left mid-lower atelectasis and pleural effusion

- **The EKGs** were conducted to determine a cardiac cause of hypoxic dyspnea. The EKGs allow for the patient's cardiac electrical conduction to be viewable (Capriotti, 2020).
- **The CXRs** were conducted to rule out causes of chest pain, hypoxia, and shortness of breath. The CXR allows for viewing the size and condition of the heart and lungs while showing the surrounding osseous structures (Capriotti, 2020).
- **The CTs and ECHO** were indicated with hypoxia and shortness of breath. The ECHO uses sound waves to visualize the cardiac valve functionality (Capriotti, 2020). The CTs allow for a more in-depth viewing of the cardiothoracic structures (Capriotti, 2020).
- **The MRI** was conducted to decipher the cause of back pain. An MRI allows for exceptional soft connective tissue visualization (Capriotti, 2020).

Diagnostic Test Reference (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Sarah Bush Lincoln Health Reference Guide. (2021). *Cerner*. https://www.sarahbush.org

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

Home Medications (5 required)

Brand/ Generic	Lasix/ Furosemide	Xarelto/ Rivaroxaban	Synthroid/ Levothyroxine	Lipitor/ Atorvastatin	Pulmicort /Budesonide
Dose	40 mg	10mg	75 mcg	20 mg	0.5 mg
Frequency	Daily	Daily	Daily	At night	Twice daily
Route	Oral	Oral	Oral	Oral	Inhalation
Classification	Loop diuretic, antihypertensive	Direct factor Xa inhibitor, anticoagulant	Synthetic thyroxine, thyroid hormone replacement	HMG-CoA reductase inhibitor, antihyperlipidemic	Corticosteroid, anti-inflammatory
Mechanism of Action	Inhibits sodium and chloride reabsorption at the proximal and distal tubules as well as the ascending loop of Henle.	Interrupts intrinsic and extrinsic pathways of the blood coagulation cascade, inhibits thrombin formation.	The synthetic T4 hormone is chemically identical to that produced in the human thyroid gland. When a deficiency is present, this drug will maintain normal T4 levels. Circulating serum T3 and T4 levels exert a feedback effect on both TRH and TSH secretion. When	This medication lowers plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and increasing the number of hepatic low-density	Inhibits inflammatory cells and mediators, possible by decreasing influx into nasal passages, bronchial walls, or the intestines. As a result, nasal or airway inflammation decrease. Oral inhalation also inhibits mucus secretion in the airways, decreasing the

			serum T3 and T4 levels increase, TRH and TSH secretion decrease. When thyroid hormone levels decrease, TRH and TSH secretion increases. TSH is used for the diagnosis of hypothyroidism and evaluation of levothyroxine (T4) therapy	lipoprotein (LDL) receptors on the cell surface to enhance uptake and catabolism of LDL. It also reduces LDL production and the number of LDL particles. Additionally, this drug lowers apolipoprotein B, triglycerides, very low LDL, intermediate lipoprotein cholesterol, and total cholesterol while increasing high-density lipoprotein cholesterol and apolipoprotein A1.	amount and viscosity of sputum.
Reason Client Taking	HTN	AF	Thyroid deficiency	HLD	COPD
Contraindications (2)	Anuria, hypokalemia	Renal failure, prosthetic	Pregnancy, diabetes	Hepatic insufficiency,	Status asthmaticus, recent nasal

		heart valves		rhabdomyolysis	surgery
Side Effects/Adverse Reactions (2)	Hyperkalemia, thrombocytopenia	Bleeding, diarrhea	Headaches, angioedema	Myalgia, pancreatitis	Amnesia, pancreatitis
Nursing Considerations (2)	Monitor the patient's fluid status. Be sure to monitor the patient's electrolytes.	Be sure to monitor the patient for bleeding from venipuncture sites and orifices. Monitor the patient for easy bruising and petechiae.	This medication can cause tachycardia. Monitor for thyroid crisis.	This medication can cause muscle spasms. This medication can cause liver damage.	Adrenal insufficiency may occur if the patient switches from an oral corticosteroid to an inhalant. This medication can worsen hypertension.
Key Nursing Assessment(s) Prior to Administration	Assess the patient's serum potassium level. Assess the patient's blood pressure.	Review the patient's platelet count. Perform medication reconciliation to determine if the patient is on any other anticoagulants.	Assess the patient's heart rate. Auscultate the patient's heart.	Review the patient's LFTs. Review the patient's serum glucose; this medication can cause disturb glucose homeostasis.	Auscultate the patient's lungs to determine whether the medication improves their breathing. Assess the patient's SaO2.
Client Teaching needs (2)	Take this medication at the same time each day to maintain therapeutic	Report abnormal bleeding. Do not stop taking this medication without	Do not stop taking this medication abruptly. Take the medication 30 minutes before	Report jaundice, abdominal pain, and weakness. This medication	Inhale deeply and forcibly during each administration. Shake the inhaler prior to administration.

	effects. Eat more foods with potassium or take a potassium supplement to prevent hypokalemia.	consulting your provider to ensure another acquisition of another anticoagulant medication.	breakfast because it is absorbed best on an empty stomach.	is not a substitute for a low-cholesterol diet.	

Hospital Medications (5 required)

Brand/ Generic	Maxipime/ Cefepime	Protonix/ Pantoprazole	Versed/ Midazolam	Fentora/ Fentanyl	Mucomyst 10%/ acetylcysteine
Dose	2 g	40 mg	1 mg	25 mcg	4 mL
Frequency	Every 12 hours	Daily	PRN anxiety	PRN pain	Thrice daily
Route	Intravenous Piggyback	Intravenous push	Intravenous push	Intravenous push	Inhalation
Classification	Cephalosporin, antibiotic	Proton-pump inhibitor, antacid	Benzodiazepine, sedative	Opioid, analgesic	L-cysteine derivative, mucolytic, Tylenol antidote
Mechanism of Action	This medication interferes with bacterial cell wall synthesis by inhibiting the final step in cross-linking peptidoglycan strands.	This medication inhibits gastric acid secretion through selective binding to and permanent inhibition of H+/K+ - ATPase, the "proton pump," on the secretory surface of	This medication agonizes the activity of gamma-aminobutyric acid.	This medication binds to the CNS's opioid receptors, altering the perception of pain.	This medication decreases the viscosity of pulmonary secretions by breaking disulfide links that bind glycoproteins in mucus.

		parietal cells. The reduced gastric acidity provides a suitable environment for antibiotic treatment of Helicobacter pylori.			
Reason Client Taking	Nosocomial PNU	Gastric reflux prophylaxis	Anxiety	Back pain	Thick secretions
Contraindications (2)	Cephalosporin hypersensitivity, CKD	CKD, hepatic disease	Shock, glaucoma	Hypotension, respiratory suppression	HTN, CHF
Side Effects/Adverse Reactions (2)	Thrombocytopenia, arthralgia	Rhabdomyolysis, pancreatitis	Respiratory depression, hypotension	Bradycardia, hypoventilation	Hypotension, constipation
Nursing Considerations (2)	Use cautiously in patients with renal insufficiency. Obtain culture and sensitivity prior to initiating therapy.	This medication can cause hypomagnesemia, so monitor the patient's magnesium level. This medication can cause *Clostridium difficile*, so monitor the patient for foul-smelling diarrhea.	Monitor the patient's respiratory status. Monitor the patient's blood pressure.	Closely monitor in patients with COPD. Monitor for profound sedation.	The 10% inhalant can be used undiluted. This medication may adversely affect the respiratory system.
Key Nursing Assessment(s) Prior to Administration	Review the patient's culture and sensitivity. Review the patient's creatinine and BUN.	Assess for hypersensitivity. Review the patient's magnesium level.	Assess the patient's respiratory status. Assess the patient's blood pressure.	Assess the patient's respiratory status Assess the patient's pain level.	Assess the patient's respiratory status. Review the patient's LFTs.

Client Teaching needs (2)	Report severe diarrhea. Immediately seek emergent care if the patient develops altered mentation.	Notify the provider if you experience a decrease in urine output. Notify the provider if you experience persistently strange symptoms, which may be hypomagnesemia.	This medication has an amnesic effect, so short-term memory may be an issue. Do not drink alcohol as further CNS depression will occur.	Avoid alcohol while on fentanyl. Avoid benzodiazepines unless specifically prescribed.	This medication has an unpleasant smell; however, the scent resides. Consume 2-3L of fluid daily to aid the thinning of secretions.

Medications Reference (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Sarah Bush Lincoln Health Reference Guide. (2021). *Cerner*. https://www.sarahbush.org

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** Responsive to speech **Orientation:** Oriented to person, place, time, situation **Distress:** Appears in pain and dyspneic	**Alertness:** Responsive to speech **Orientation:** Oriented to person, place, time, situation **Distress:** Appears in pain and dyspneic **Appearance:** Appropriately dressed

Appearance: Appropriately dressed	
INTEGUMENTARY (2 points): **Skin color:** Usual for ethnicity and age **Character:** Dry, intact **Temperature:** Warm **Turgor:** Loose **Rashes:** None **Bruises:** LAC bruise r/t IV insertion **Wounds:** Pressure injury on coccyx **Braden Score:** 13 **Drains present:** No **Type:** N/A	**Skin color:** Usual for ethnicity and age **Character:** Dry, intact **Temperature:** Warm **Turgor:** Loose
HEENT (1 point):	**Head:** Normocephalic, symmetrical facial features **Neck:** Palpable thyroid cartilage, no tracheal deviation, no palpable lymph nodes, 3+ carotid pulse bilaterally **Eyes:** pupils are equal, round, reactive to light, and accommodate white sclera & conjunctiva, intact extraocular movements **Ears:** no drainage, auricle pinna are intact **Oral cavity:** Pink, moist, firm gingiva Pink, moist buccal mucosa Soft palate rises and falls, symmetrical uvula Teeth are discolored **Nose:** Bilateral patency, no discharge, no frontal or maxillary sinus pain
CARDIOVASCULAR (2 points): **Heart rhythm:** Regular **Heart sounds:** S1, S2 **Pulses:** 3+ radial bilaterally, carotid bilateral, 2+ tibial bilaterally **Cap refill:** <3 seconds **Neck Vein Distention:** None **Edema:** 0 **Location of Edema:** N/A	**Heart rhythm:** Regular **Heart sounds:** S1, S2 **Pulses:** 3+ radial bilaterally, carotid bilateral, 2+ tibial bilaterally **Cap refill:** <3 seconds **Edema:** 0
RESPIRATORY (2 points): **Accessory muscle use:** No **Breath Sounds:** Coarse in all lobes anteriorly and posteriorly, diminished in both bases **ET Tube:** N/A **Size of tube**: N/A	**Respiratory Rate:** Regular **Respiratory pattern:** Regular **Respiratory sounds:** Coarse in all lobes anteriorly and posteriorly, diminished in both bases **Lung aeration:** Right lung greater than left in all lobes anteriorly and posteriorly

Placement (cm to lip): N/A **Respiration rate:** N/A **FiO2:** N/A **Total volume (TV):** N/A **PEEP:** N/A **VAP prevention measures:** N/A	**Oxygen:** High-flow (15 L) non-rebreather FiO2 100%
GASTROINTESTINAL (2 points): **Diet at home:** Heart-healthy **Current Diet**: NPO **Height:** 181.6 cm **Weight:** 104.9 kg **Auscultation Bowel sounds:** Yes **Last BM:** 10/25/21 **Palpation: Pain, Mass etc.:** No pain, no distention, no masses **Inspection:** Yes **Distention:** No **Incisions:** None **Scars:** 6" vertical scar in LLQ by umbilicus **Drains:** None **Wounds:** None **Ostomy:** None **Nasogastric:** None **Feeding tubes/PEG tube:** Yes **Type:** Orogastric tube	**Bowel sounds:** Active in all 4 quadrants **Abdomen:** Supple, nontender, obese
GENITOURINARY (2 Points): **Quantity of urine:** 279 mL **Pain with urination:** No **Dialysis:** No **Inspection of genitals:** No abnormalities **Catheter:** Yes **Type:** Indwelling **Size:** 16 French **CAUTI prevention measures:** Yes	**Color:** Yellow **Clarity:** Turbid **CAUTI prevention measures:** Ensure the collection container rests below the level of the bladder, Q4 perineal care, appropriate hand hygiene and glove usage
MUSCULOSKELETAL (2 points): **Supportive devices:** None while in CCU **Strength:** 2 legs, 3 arms, 4 grip **ADL Assistance:** Yes **Fall Risk:** Yes **Fall Score:** 60 **Activity/Mobility Status:** Bedrest **Independent (up ad lib)**: No **Needs assistance with equipment:** Yes	**Neurovascular status:** Pink nailbeds, cap refill <3 seconds, warm extremities **ROM:** Active in all 4 extremities bilaterally **Strength:** 2 in lower extremities bilaterally, 3 in upper extremities bilaterally, 4 grip strength bilaterally

Needs support to stand and walk: Yes	
NEUROLOGICAL (2 points): **MAEW:** No **PERLA:** Yes **Strength Equal:** No, legs +2, arms +3	**Orientation:** Oriented to person, place, time, situation **Cognition:** Normal **Speech:** Clear **Sensory:** Light and deep stimuli response **LOC:** Responsive to speech
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** Assessed **Developmental level:** Assessed **Religion & what it means to pt.:** Assessed **Personal/Family Data (Think about home environment, family structure, and available family support):** Assessed	**Coping method(s):** Music, books, walks **Developmental level:** High school education **Religion:** Nondenominational Christian **Personal/Family Data:** Lives at home, stays in contact with children

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0750	76 bpm	121/87 mm Hg	20 rr	36.2 C	98%
1030	78 bpm	119/58 mm Hg	19 rr	36.1 C	94%

Vital Sign Trends/Correlation: The patient's vital signs remained stable through the clinical time; however, during oral care or vocal exertion, the patient's oxygen saturation fell below 93% because the non-rebreather had to be pulled back slightly.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

0745	Numerical	Low back	5/10	Dull ache	Turned patient
1000	Numerical	Low back	5/10	Dull ache	Turned patient

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 2 20 gauges **Location of IV:** RAC & LAC **Date on IV:** 10/24/21 **Patency of IV:** RAC patent, LAC integrity compromised **Signs of erythema, drainage, etc.:** RAC no evidence of erythema, drainage, phlebitis, or infiltration LAC evidence of infiltration **IV dressing assessment:** RAC clean, dry, intact LAC soiled with blood, damp, not intact	D5W 1000 mL @ 40 mL/hr
Other Lines (PICC, Port, central line, etc.)	
Type: N/A **Size:** N/A **Location:** N/A **Date of insertion:** N/A **Patency:** N/A **Signs of erythema, drainage, etc.:** N/A **Dressing assessment:** N/A **Date on dressing:** N/A **CUROS caps in place:** N/A **CLABSI prevention measures:** N/A	N/A

Intake and Output (2 points)

Intake (in mL) – List what type of intake and how much	**Output (in mL) – List what type of output and how much**
D5W 118.99 mL NS 16.52 mL Cefepime with NS 46.44 mL	Voided 279 mL

Nursing Care

Summary of Care (2 points)

Overview of care: Physical assessment, oral care, medication administration, repositioning, I & O

Procedures/testing done: CXR completed during clinical period

Complaints/Issues: The patient expressed no complaints or issues.

Vital signs (stable/unstable): The patient's vital signs remained stable throughout the clinical period, with the exception of a slight decline in SaO2 while performing oral care. The patient had no changes in status.

Tolerating diet, activity, etc.: Bedrest, NPO

Physician notifications: Continued BiPAP 14/7 100% FiO2, soft restraints, Advance to high-flow nonrebreather, DC Lasix, swallow evaluation, repeat sodium at 1700, cefepime x2 more days to complete 5-day therapy, left side up, right side down, bronchodilators, CPT with percussive therapy

Future plans for patient: Eventually initiate hospice services

Discharge Planning (2 points)

Discharge location: Home with son

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: Follow up with hospice provider

Education needs: Hospice focuses on comfort and relieving pain and does not attempt any curative measures.

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

Nursing Diagnosis	Rational	Intervention (2 per	Evaluation

• Include full nursing diagnosis with “related to” and “as evidenced by” components	• Explain why the nursing diagnosis was chosen	**dx)**	• How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to CHF, PNU, and atelectasis as evidenced by hypercapnia and hypoxia.	In nursing, the ABC protocol is the rule of the thumb to follow, and this patient’s breathing is the priority.	**1.** Turned the patient **2.** Auscultated lung sounds	The patient, due to his chronic respiratory problems and age, will always have impaired gas exchange. He is receiving 15 L of 100% FiO2 by nonrebreather in attempts to lessen the effects of his illnesses. He tolerates the mask well, and it keeps his SaO2 above 94%.
2. Imbalanced fluid volume related to CHF and CKD III as evidenced by FVO around admission and present hypernatremia	With CHF, FVO is typical for exacerbations. During the clinical period, the patient had no evidence of FVO, being that he has been on Lasix.	**1.** Monitored serum levels of sodium and potassium **2.** Monitored patient’s urinary output	The patient’s fluid volume status appears to be relatively stable. His hourly UO was 39.9 mL.
3. Chronic pain related to lumbar spinal stenosis as evidenced by 5/10 pain.	Chronic pain is essential to manage, especially when hospice services are planned. However, pain management is not as important as promoting effective gas exchange.	**1.** Administered acetaminophen **2.** Turned the patient	The turning seemed to relieve some of the pain; although, the Tylenol did not do anything beneficial.
4. Risk for infection (sepsis) related to two active infections as evidenced by two positive cultures.	While the patient was recently diagnosed with a UTI and HA-PNU, the possibility of sepsis is a great risk and needs to	**1.** Administered cefepime drip **2.** Monitored WBCs	The patient did not acquire a systemic bloodstream infection.

	be followed up with carefully.		
5. Anticipatory grieving related to the expectation of the end of psychological function as evidenced by related to the powerlessness of the present situation.	The four prior nursing diagnoses, if not prioritized, can end the patient's life quickly. While the interdisciplinary team is suspecting to initiate hospice soon, the actual psychological priority begins after initiation.	**1.** Used active listening **2.** Reviewed past life experiences	The patient appeared to find relief in expressing himself and his concerns for the future, as well as reminiscing.

Other References (APA):

Swearingen, P. L., & Wright, J. (2018). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Mosby.

Concept Map (20 Points):

Subjective Data

The patient reports cough that feels like something is stuck in his throat and shortness of breath. He has lower back pain rated 5/10 that acquires relief with medication.

Objective Data

Abnormal Labs:
Serum Na: 147 mEq/L
Serum K: 3.3 mEq/L
Serum BUN: 40 mg/dL
Serum Mag: 1.3 mg/dL
RBCs: 3.77 10^6/mcL
H & H: 11.2 g/dL & 33.7%
Lymphocytes: 82.8%
Neuts: 9.7%
Assessment Findings:
Respiratory sounds: Coarse in all lobes anteriorly and posteriorly, diminished in both bases
Lung aeration: Right lung greater than left in all lobes anteriorly and posteriorly
Diagnostics & Imaging
CXRs and CTs: PNU, lung consolidation, atelectasis, pleural effusions
MRI: T12-L1, L1-L2 edema and compression
Positive urine and bronchial cultures

Patient Information

A 93-year-old male with a history of CHF, COPD, HTN, HLD, CKD III, anemia, and hypothyroidism was admitted on 10/11/2021 with a chief complaint of a cough and shortness of breath.

Nursing Diagnosis/Outcomes

1. Impaired gas exchange related to CHF, PNU, and atelectasis as evidenced by hypercapnia and hypoxia.
- Patient will maintain SaO2 above 94% indefinitely.
2. Imbalanced fluid volume related to CHF and CKD III as evidenced by FVO around admission and present hypernatremia
-Patient will output at least 30 mL/hr and his electrolytes will be within normal limits indefinitely
3. Chronic pain related to lumbar spinal stenosis as evidenced by 5/10 pain.
-Patient will rate pain a 0/10 by discharge.
4. Risk for infection (sepsis) related to two active infections as evidenced by two positive cultures.
- Patient will never go septic.
5. Anticipatory grieving related to the expectation of end of psychological function as evidenced by related to powerlessness of present situation
-Patient will accept his inevitable death before he passes away.

Nursing Interventions

1. Turned the patient
2. Auscultated lung sounds
3. Monitored serum levels of sodium and potassium
4. Monitored patient's urinary output
5. Administered acetaminophen
6. Turned the patient
7. Administered cefepime drip
8. Monitored WBCs
9. Used active listening
10. Reviewed past life experiences