N431 Care Plan #1

Lakeview College of Nursing

Olivia Powell

Demographics (3 points)

Date of Admission 9/25/2021	**Patient Initials** M.A.	**Age** 71 years old	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Atorvastatin, Ezetimibe, Rosuvastatin
Code Status Full	**Height** 5’9	**Weight** 166 lbs	

Medical History (5 Points)

Past Medical History: Atrial fibrillation, coronary artery disease, congestive heart failure, chronic kidney disease: stage 3, diabetes mellitus

Past Surgical History: Pt stated he had surgery for an implantable cardiac defibrillator.

Family History: Pt denies any family history.

Social History (tobacco/alcohol/drugs): Former smoker, no use of drugs, used alcohol occasionally

Assistive Devices: not applicable

Living Situation: Pt lives at home with his wife.

Education Level: High school with some college

Admission Assessment

Chief Complaint (2 points): Fever and chills

History of present Illness (10 points): The pt came to the emergency department complaining of chills and a fever. Pt checked his oxygen saturation at home, and it was 85%. Upon arrival, his oxygen was checked, and his level was 89-90%. The pt was admitted to the unit for hypoxia related to his heart disease. The pt had not seeked treatment before coming to the emergency department.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Heart Failure

Secondary Diagnosis (if applicable): not applicable

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

Heart failure, also known as HF, happens when the heart cannot pump enough blood throughout the body. It usually occurs from a cardiac disease that effects the left side of the heart's ability to fill or eject blood (Swearingen & Wright, 2019). By the heart not pumping efficiently, all parts of the body suffer due to lack of blood flow to carry out each systems duty. Heart failure is a chronic disease that could have acute episodes of volume overload and some pulmonary edema.

Some signs and symptoms of heart failure include dyspnea upon exertion/rest, wheezing, coughing, cyanosis, and sudden weight gain from fluid retention. More intense signs and symptoms are palpitations, change in mental status, and decreased cardiac output (Swearingen & Wright, 2019).

For someone diagnosed with heart failure, it is common to see decreased or elevated blood pressure, tachypnea, ascites, and pitting edema (Swearingen & Wright, 2019). Some common labs to correlate with heart failure are elevated serum blood urea nitrogen, decreased serum electrolytes, and elevated cardiac enzymes (Capriotti & Frizzell, 2016).

In order to help someone be diagnosed with heart failure there are some diagnostic testing that can be conducted. Some of the diagnostic testing for heart failure include chest radiography, electrocardiogram (ECG), cardiac catherization, and a stress echocardiogram (Capriotti & Frizzell, 2016). This patient had a continuous telemetry pack on to help read his heart rhythm due to his atrial fibrillation.

Treatment for heart failures includes managing the symptoms that are present. There are certain medications that can also relief symptoms such as beta blockers, diuretics, and digoxin (Capriotti & Frizzell, 2916). This patient was being treated for his symptoms during the hospitalization.

Pathophysiology References (2) (APA):

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

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.

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	**4.10-5.70**	**N/A**	**4.09**	**Anemia is common in a person with heart failure (Capriotti & Frizzell, 2016).**
Hgb	**12-18**	**N/A**	**12.3**	
Hct	**37-51**	**N/A**	**38.4**	
Platelets	**140-400**	**N/A**	**192**	
WBC	**4-11**	**N/A**	**7.40**	
Neutrophils	**37-85**	**N/A**	**N/A**	
Lymphocytes	**20-45**	**N/A**	**11.8**	**The pt came in with a fever indicating an infection (Capriotti & Frizzell, 2016).**
Monocytes	**0-15.0**	**N/A**	**12.2**	
Eosinophils	**0-6.0**	**N/A**	**N/A**	
Bands	**0-3.0**	**N/A**	**0.8**	

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	N/A	137	
K+	3.5-5.1	N/A	4.8	
Cl-	95-110	N/A	N/A	
CO2	22-29	N/A	23.0	
Glucose	74-100	N/A	151	A person with diabetes mellitus will have higher readings (Capriotti & Frizzell, 2016).
BUN	8-26	N/A	19	
Creatinine	0.55-1.30	N/A	1.02	
Albumin	3.4-10.3	N/A	2.7	Low levels indicate malnutrition (Capriotti & Frizzell, 2016).
Calcium	8.4-10.3	N/A	8.3	Someone with heart failure tends to have lower BP readings cause hypocalcemia (Capriotti & Frizzell, 2016).
Mag	1.6-2.6	N/A	N/A	
Phosphate	2.5-4.5	N/A	N/A	
Bilirubin	0.2-1.2	N/A	1.2	
Alk Phos	40-150	N/A	186	An increase in these levels indicated decreased perfusion (Capriotti & Frizzell, 2016).
AST	5-34	N/A	30	
ALT	0-55	N/A	29	
Amylase	23-85	N/A	N/A	
Lipase	12-70	N/A	N/A	

Lactic Acid	**0.5-1**	**N/A**	**N/A**	
Troponin	**0-0.03**	**N/A**	**0.02**	
CK-MB	**0-5**	**N/A**	**N/A**	
Total CK	**22-198**	**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	**0.9-1.1**	**N/A**	**N/A**	
PT	**12.2-14.3**	**N/A**	**N/A**	
PTT	**23-34**	**N/A**	**N/A**	
D-Dimer	**100-399**	**N/A**	**N/A**	
BNP	**15-99.90**	**N/A**	**N/A**	
HDL	**<60**	**N/A**	**N/A**	
LDL	**<100**	**N/A**	**N/A**	
Cholesterol	**0-200**	**N/A**	**N/A**	
Triglycerides	**<150**	**N/A**	**N/A**	
Hgb A1c	**<7**	**N/A**	**N/A**	
TSH	**0.4-4.0**	**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	**Colorless, yellow**	**N/A**	**N/A**	

pH	**5.0-7.0**	**N/A**	**N/A**	
Specific Gravity	**1.003-1.035**	**N/A**	**N/A**	
Glucose	**Negative**	**N/A**	**N/A**	
Protein	**negative**	**N/A**	**N/A**	
Ketones	**negative**	**N/A**	**N/A**	
WBC	**0-25**	**N/A**	**N/A**	
RBC	**0-20**	**N/A**	**N/A**	
Leukoesterase	**negative**	**N/A**	**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**	**N/A**	**N/A**	
PaO2	**80-100**	**N/A**	**N/A**	
PaCO2	**35-45**	**N/A**	**N/A**	
HCO3	**22-26**	**N/A**	**N/A**	
SaO2	**93-100**	**N/A**	**N/A**	

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	**Negative**	**N/A**	**N/A**	
Blood Culture	**Negative**	**N/A**	**N/A**	
Sputum Culture	**Negative**	**N/A**	**N/A**	
Stool Culture	**Negative**	**N/A**	**N/A**	

Lab Correlations Reference (1) (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (5 points): CT scan

Diagnostic Test Correlation (5 points): The patient had a CT scan completed. It showed he was having an acute heart failure flare up. Since it is an acute episode, he was admitted to the unit to have his symptoms treated.

Diagnostic Test Reference (1) (APA):

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

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

Home Medications (5 required)

Brand/Generic	Zolpidem/ Ambien	Melatonin/ Melatonia	Amiodarone/ Nexterone	Insulin aspart/ Novolog	
Dose	5mg	3mg	200mg	1-5 units	
Frequency	Once at bedtime	Once at bedtime	Daily	As needed	
Route	Oral	Oral	Oral	Subcutaneous	
Classification	Sedative hypnotic	Eprescribe	Antiarrhythmic	Insulin	
Mechanism of Action	Increases GABA effects in the CNA by binding to the GABA a receptors	Inhibits cAMP signal transduction pathways	Relaxes smooth muscles that line vascular walls to decrease	Regulates glucose metabolism	

			afterload		
Reason Client Taking	The pt is experiencing insomnia.	The pt is having difficulty sleeping.	The pt has heart disease.	The pt has diabetes mellitus.	
Contraindications (2)	Depression, drug abuse	Bleeding disorders, concurrent use of prescription drugs	Hypokalemia, thyrotoxicosis	Hypoglycemia, hypokalemia	
Side Effects/Adverse Reactions (2)	Dizziness, drowsiness	Increase in blood pressure, increase in depression	Cough, unbalance gait	Increase of cardiovascular events, cancer	
Nursing Considerations (2)	Assess cognition, adjust dosage in women	Monitor blood glucose, monitor lipid panel	Place pt on a cardiac monitor, monitor blood pressure	Ensure insulin is at room temperature, check for air bubbles in the syringe	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor for signs of anaphylaxis, monitor for any signs of hypersensitive	Monitor coagulation panel, monitor melatonin levels	Obtain baseline chest x-ray, obtain baseline liver function	Wait for alcohol to dry on injection site, keep the muscle relaxed	
Client Teaching needs (2)	Tell pt to avoid alcohol, take medication on an empty stomach	Instruct pt to take at bedtime, Caution pt to avoid driving	Educate pt to avoid prolonged exposure to sunlight, can be taken with or without food	Eat meals within 5-10 minutes of administration, do not administer extra if a dose is missed	

Hospital Medications (5 required)

Brand/Generic	Nitroglycerin/ Nitrostat	Dextrose 50%/Glucose	Calcium carbonate/Tums	Ampicillin/ Ampi	
Dose	0.4mg	12.5mg	400mg	12 g in 880mL	
Frequency	PRN	PRN	Q 6 h	Continuous	

Route	Sublingual	IV push	Oral	IV infusion	
Classification	Vasodilator	Dextrose water	Antacids	Antibiotic	
Mechanism of Action	Reduces myocardial oxygen requirements by vasodilation	Acts a source of carbohydrate calories and restores glucose in hypoglycemia episodes	Increases calcium in the body	Interferes with cell wall synthesis which binds to penicillin-binding proteins	
Reason Client Taking	The pt was experiencing chest pain.	The pt needed this for hypoglycemia.	The pt was experiencing reflux.	The pt had a fever indicating infection.	
Contraindications (2)	Allergy to nitroglycerin, myocardial infarction	Intracranial hemorrhage, severe dehydration	Hypersensitivity , kidney stones	Dialysis, asthma	
Side Effects/Adverse Reactions (2)	Nausea, burning under the tongue	Bluish color, shortness of breath	Rapid weight gain, dry mouth	Rash, hives	
Nursing Considerations (2)	Ensure it is stored in light resistant container, if hypotension occurs, pt needs IV fluids	Monitor for confusion, obtain urine for presence of ketones	Do not administer to a pt with low serum phosphate, watch for rapid weight gain	Monitor for ampicillin rash, observe for seizures	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Check blood pressure before administering, monitor lung sounds	Measure blood glucose, have consult with pt who are pregnant	Measure levels of calcium, Always give with food	Administer only after blood culture is drawn, monitor renal function	
Client Teaching needs (2)	Never chew, crush, or swallow the pill, do not eat or drink	Keep out of reach of children, do not take dextrose if	Do not take 1-2 hours of taking other medications, tell provider which	Take on an empty stomach, take 30 minutes	

	while it is dissolving	allergic to dextrose	medications that are prescribed	before or 2 hours after each meal	

Medications Reference (1) (APA):

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

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**A&Ox4. Well groomed. No acute distress.**
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 18** **Drains present: Y☐ N ☒** **Type:**	**Warm, dry, appropriate for race. No rashes, bruises, or wounds noted. Rapid recoil turgor.**
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and neck symmetrical. Trachea midline with no deviation. Thyroid nonpalpable with no nodules noted.** .
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒**	**Pt has atrial fibrillation. Normal rate. Capillary refill less than 3 seconds.**

Location of Edema: N/A	
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Clear lung sounds in all lobes. No wheezes, crackles, or rhonchi noted.**
GASTROINTESTINAL (2 points): **Diet at home:** Regular **Current Diet:** Regular **Height:** 5'9 **Weight:** 166lbs **Auscultation Bowel sounds:** Present in all 4 quadrants **Last BM:** 9/28/21 **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** none noted. **Incisions:** none noted. **Scars:** none noted. **Drains:** none noted. **Wounds:** none noted. **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	.
GENITOURINARY (2 Points): **Color:** yellow **Character:** clear **Quantity of urine:** 600mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL (2 points): **Neurovascular status:** oriented **ROM:** All extremities move well **Supportive devices**: N/A **Strength:** All extremities have equal strength **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☒** **Fall Score:** 9	

Activity/Mobility Status: Tolerates activities well **Independent (up ad lib)** ☐**X** **Needs assistance with equipment** ☐ **Needs support to stand and walk**☐	
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** Alert **Mental Status:** appropriate for age **Speech:** clear, not slurred **Sensory:** no sensory deficit noted **LOC:** Awake and alert	.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** Pt reads a book and talks to his wife. **Developmental level: Appropriate for age** **Religion & what it means to pt.:** Pt is Christian. Pt stated religion is a small part of his life. **Personal/Family Data (Think about home environment, family structure, and available family support):** Pt lives at home with his wife. Wife came to visit at bedside during shift.	.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1330	**84 bpm**	**103/70**	**18**	**97.6 F**	**96 RA**
1530	**77 bpm**	**93/62**	**16**	**98.3 F**	**92 PA**

Vital Sign Trends: The pt's vital signs are stable upon assessment.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

1330	**Numeric**	**-**	**0**	**-**	**-**
1530	**Numeric**	**-**	**0**	**-**	**-** **Pt reported no pain both assessments.**

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 20 g **Location of IV:** R forearm **Date on IV:** 9/29/2021 **Patency of IV:** flushable **Signs of erythema, drainage, etc.:** none noted. **IV dressing assessment:** clean, dry, and intact.	Ampicillin 12 g in 0.9% NaCl 880 mL

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
120mL	**600mL**

Nursing Care

Summary of Care (2 points)

Overview of care: Pt was being monitored for any signs of heart complications. Oxygen was applied as needed.

Procedures/testing done: CT scan, labs

Complaints/Issues: The pt complained of fever and chills upon arrival. During the shift, the pt had no complaints.

Vital signs (stable/unstable): During the shift, the pt's vital signs were stable.

Tolerating diet, activity, etc.: Pt is tolerating ADL's well. Pt is on a regular diet.

Physician notifications: There were no notifications during the shift.

Future plans for patient: The pt will be discharged home on 10/1/2021.

Discharge Planning (2 points)

Discharge location: The pt will discharge home to his wife.

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: Pt is scheduled to have LVAD surgery on October 6, 2021.

Education needs: Pt will need education on a low sodium diet and to limit fluid intake.

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. Decreased cardiac output related to structural changes as evidenced by changes in blood pressure.	The pt is diagnosed with atrial fibrillation and has an ICD.	1.Administer oxygen as indicated by the pt's symptoms. 2.Provide a restful environment for rest and sleep.	The pt was administered oxygen as needed. Pt was provided a restful environment and was able to sleep.
2. Ineffective tissue perfusion related to decreased cardiac output as evidenced by altered blood pressure readings.	The pt blood pressure was 103/70 and then dropped to 93/62.	1. Monitor cardiac rhythms on 12 lead ECG. 2.Monitor oxygen saturation via pulse oximetry.	Pt was placed on an ECG. Pt had a continuous oxygen monitoring from the pulse oximetry.
3. Risk for impaired gas	Pt has atrial fibrillation,	1. Maintain chair/bed rest with	The pt was encouraged to maintain bedrest to help

exchange related to pt having multiple heart diseases.	coronary artery disease, and congenital heart disease.	the HOB elevated 20-30 degrees. 2Administer oxygen as needed.	with oxygenation. The pt was administered oxygen as needed.
4. Deficient knowledge related to misconceptions about interrelatedness of cardiac failure as evidence by preventable episodes of heart failure.	Pt presented to the ED with a fever.	1.Review signs and symptoms that require immediate medical attention such as fever, fatigue, and hemoptysis. 2. Discuss the importance of limiting sodium intake.	Pt displayed an understanding of the signs and symptoms that require attention. Pt understood the effects of not limiting sodium intake.

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

Pt presented to the ED with a fever and chills.
Pt's oxygen was 89-90% upon arrival.

Nursing Diagnosis/Outcomes

Decreased cardiac output related to structural changes as evidenced by changes in blood pressure.
pt was administered oxygen as needed. Pt was provided a restful environment and was able to sleep.
Ineffective tissue perfusion related to decreased cardiac output as evidenced by altered blood pressure readings.
The pt was placed on a 12 lead ECG. Pt had a continuous oxygen monitoring from the pulse oximetry.
Risk for impaired gas exchange related to pt having multiple heart diseases.
The pt was encouraged to maintain bedrest to with oxygenation. The pt was administered oxygen as needed.
Deficient knowledge related to misconceptions about interrelatedness of cardiac failure as evidence by preventable episodes of heart failure.
Pt displayed an understanding of the signs and symptoms that require attention. Pt understood the effects of not limiting sodium intake.

Objective Data

HR 84 bpm
RR 18
BP 103/70
T 97.6 F
O2 96% RA
Pt reported no pain

Patient Information

M.A.
71 years old
Male
Full Code

Nursing Interventions

Administer oxygen as indicated by the pt's symptoms.
Provide a restful environment for rest and sleep.
Monitor cardiac rhythms on 12 lead ECG.
Monitor oxygen saturation via pulse oximetry.
Maintain chair/bed rest with the HOB elevated 20-30 degrees.
Administer oxygen as needed.
Review signs and symptoms that require immediate medical attention such as fever, fatigue, and hemoptysis.
Discuss the importance of limiting sodium intake.