N311 Care Plan # 1

Lakeview College of Nursing

Hannah Considine

Demographics (5 points)

Date of Admission 2/29/21	**Patient Initials** R.H	**Age** 77	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Married	**Allergies** Iodine Augmentin (Amoxicillin)
Code Status Full	**Height** 5’9”	**Weight** 235lb	

Medical History (5 Points)

Past Medical History:

6/1/2016- Acute chronic systolic congestive heart failure

3/17/2017- Aortic root dilation

5/16/2019- Ascending aortic aneurysm

No date- Asthma

No date- Basal cell carcinoma

No date- Benign prostatic hyperplasia

No date- Skin cancer

No date- Chronic bronchitis

6/1/2016- Chronic obstructive pulmonary disease

10/12/2015- Coronary artery disease, involving coronary artery of native heart without angina pectoris

11/4/2014- Coronary atherosclerosis

No date- Type 2 Diabetes

No date- Degenerative joint disease

8/28/2013- Degenerative joint disease of the knee

No date- Deep vein thrombosis of the leg

1/7/2015- Dyspnea

5/6/2019- Dyspnea on exertion

6/1/2016- Erectile dysfunction

No date- Hypertension

No date- Fibromyalgia

No date- Gout

No date- Hyperlipidemia

No date- Myocardial infarction

11/4/2014- Obesity

No date- Pacemaker

8/28/2013- Pain in shoulder joint

2/13/2017- A-Fib

No date- Pulmonary embolism

No date- Basal cell carcinoma on nose

Past Surgical History:

No date- Laminectomy

No date- Lithotripsy

No date- Umbilical hernia repair

No date- Oral surgery

No date- Ascending aortic aneurysm and aortic valve repair

March 2009- CABG

2/6/2020- Colonoscopy

6/30/2016- Facial soft tissue procedure

12/19/2019- Facial soft tissue procedure

No date- Hernia repair

9/19/2018- ICD generator change

2004- Inguinal hernia repair

No date- Knee arthroscopy

No date- Neck surgery

2010- Pacemaker

No date- Tonsillectomy (as child)

Family History:

Diabetes: Mother, Father, Brother, Sister

Stroke: Mother

Social History (tobacco/alcohol/drugs):

Former smoker: Quit smoking cigarettes in 1998

Never used smokeless tobacco

No alcohol or recreational drug use

Admission Assessment

Chief Complaint (2 points):

Progressive shortness of breath

History of present Illness (10 points):.

Patient was recently hospitalized on February 4th for dehydration and elevated potassium. After discharge the patient noticed his shortness of breath was getting worse, so he came to the E.R. Upon arrival to the E.R patient was complaining of orthopnea, PND, and shortness of breath. He informed E.R staff that his Cardiologist bumped his Lasix to 40mg but he hasn't noticed any improvement in symptoms. The patient stated he was having a lot of anxiety due to his shortness of breath.

Primary Diagnosis

Primary Diagnosis on Admission (3 points):.

Congestive heart failure

Secondary Diagnosis (if applicable):.

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

Heart failure is a condition caused from a weakened ventricular muscle that is unable to sufficiently pump blood to meet the needs of the body's tissues. The American Heart Association (AHA) and American College of Cardiology (ACC) define heart failure in terms of the heart's left ventricular ejection fraction (LVEF), which is the percentage of blood propelled out of the left ventricle with each contraction. Heart failure due to insufficient ejection of blood volume into the arterial circulation is referred to as systolic dysfunction, whereas heart failure caused by

the ventricle's inability to relax, expand, and fill with adequate blood volume is referred to as diastolic dysfunction (Capriotti, 2020). Hypertension is one the greatest risk factor for the developing heart failure, as more than 75% of patients with heart failure are treated for HTN before developing it (Capriotti, 2020). My patient does have a history of Hypertension so it makes sense how that could lead to a diagnosis of CHF. Other causes of heart failure include coronary artery disease and metabolic syndrome; a history of diabetes mellitus also increases the risk of developing the disorder (Capriotti, 2020) .

There are a range of signs and symptoms for CHF. Symptoms usually depend on if you have right or left sided heart failure. My patient is in end stage heart failure so he presents with symptoms of both. Symptoms include cough, dyspnea, orthopnea, PND, cool pale extremities, confusion, edema, nocturia, JVD, anorexia, and abdominal swelling.

Diagnostic testing is just as important as signs and symptoms when it comes to diagnosing CHF. The diagnostic tests for CHF include pulmonary congestion on x-rays, cardiomegaly on chest x-ray, elevated BNP, elevated PCWP, decreased LVEF, high heart rate, weak pulses, elevated jugular venous pressure, elevated central venous pressure, dilutional hyponatremia, and hypokalemia.

There are many different treatment options for CHF. These treatment options are similar for left and right sided heart failure. These treatments include positioning pt. in high fowlers, oxygen for hypoxia, a low sodium diet followed up a fluid restriction, daily weights to monitor water retention, diuretics, aldosterone antagonists, beta-1-adrenregic blockers, ivabradine, ACE inhibitors, angiotensin II receptor blockers, nitrates, isosorbide, and digitalis.

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis advantage for pathophysiology: introductory concepts and clinical perspectives*. F.A. Davis.

Heart Association Task Force on Performance Measures and the American Medical Association-Physician Consortium for Performance Improvement. *Journal of the American College of Cardiology*, *59*(20), 1812–1832. Epub 2012 Apr 23.

Laboratory Data (20 points)

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

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.90-4.98	3.21	3.10	Low levels of RBC could be due to overhydration (CHF) (Abarra, 2018).
Hgb	12.0-15.5	10.6	9.9	Low Hgb levels could be due to renal problems (Abarra, 2018).
Hct	35-45	33.7	32.7	Low Hct levels could be due to over hydration (CHF) (Abarra, 2018).
Platelets	140-400	250	222	N/A
WBC	4.0-9.0	10.51	9.47	High WBC levels could be due to infection, and inflammatory diseases (Abarra, 2018).
Neutrophils	1.5-8.0	8.47	7.82	
Lymphocytes		8.9	6.1	

Monocytes		7.9	9.6	
Eosinophils		1.5	0.8	
Bands		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-	135-145	140	137	N/A
K+	3.5-5.1	3.5	3.1	Low K+ levels could be low due to taking a corticosteroid and diuretic (Abarra, 2018).
Cl-	98-107	112	101	High CL- levels could be elevated due to salt and water retention (Abarra, 2018).
CO2	22-29	19.4	29.3	
Glucose	70-99	97	118	High glucose levels could be high due to having a history of type 2 diabetes (Abarra, 2018).
BUN	6-20	29	30	High BUN levels could be do to decreased renal perfusion (CHF) (Abarra, 2018).
Creatinine	0.50-1.00	1.38	1.30	High creatinine levels could be due to decreased excretion (Abarra, 2018).
Albumin	3.5-5.2	2.7	3.2	Low albumin levels could be due to heart failure (Abarra, 2018).
Calcium	8.4-10.5	6.9	8.7	Low Ca levels could be due to hypoalbuminemia and loop diuretics (Abarra, 2018).
Mag	1.7-2.2	2.1	2.5	High MG levels cCould be due to intake in the presence of renal failure
Phosphate		N/A	N/A	
Bilirubin		N/A	N/A	

Alk Phos		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		N/A	N/A	
pH		N/A	N/A	
Specific Gravity		N/A	N/A	
Glucose		N/A	N/A	
Protein		N/A	N/A	
Ketones		N/A	N/A	
WBC		N/A	N/A	
RBC		N/A	N/A	
Leukoesterase		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		N/A	N/A	
Blood Culture		N/A	N/A	
Sputum Culture		N/A	N/A	
Stool Culture		N/A	N/A	

Lab Correlations Reference (APA):

Abarra, J. (2018, February 2). *Laboratory Values and Interpretation - A Nurse's Ultimate Guide*. NurseBuff. https://www.nursebuff.com/laboratory-values-for-nurses/.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Cardiac Catheterization preformed 3/2/2021

This test can help determine coronary artery narrowing or obstruction, ischemic heart disease, and hemodynamics.

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

Medications (5 required)

Brand/Generic	Lasix/ furosemide	AccuNeb/ albuterol	Eliquis/ apixaban	Flonase/ fluticasone	Zyloprim/ allopurinol
Dose	40 mg	2 Puffs	5 mg	1 spray	300 mg
Frequency	TID	BID	2 times daily	PRN 2 times daily	2 times daily
Route	IV push	Inhaled	Oral	Nasal	Oral
Classification	Loop diuretic	Adrenergic	Factor Xa inhibitor	Corticosteroid	Xanthine oxidase inhibitor
Mechanism of Action	Inhibits sodium and water reabsorption in the loop of Henle and increase urine output.	Attaches to beta2 receptors on bronchial cell membranes, which stimulates the intracellular enzyme adenylate to convert ATP to cAMP. Together, these effects relax bronchial smooth-muscle cells and inhibit histamine release	Inhibits free and clot-bound factor Xa and prothrombinase activity. By inhibiting factor Xa, apixaban decreases thrombin generation and thrombus development.	Inhibits cell involved in the inflammatory response of asthma, such as basophils, esoninphils, lymphocytes, macrophages, mast cells, and neutrophils.	Inhibits uric acid production by inhibiting xanthine oxidase, the enzyme that converts hypoxanthine and xanthine to uric acid.
Reason Client Taking	To remove excess fluid off the body	To help ease shortness of breath due to CHF	To decrease to risk of getting clots	Helps prevent complications due to asthma	To treat gout and hyperuricemia
Contraindications (2)	Anuria, hypersensiti	(Drug book only had one	Active pathological	Hypersensitivity to	(Drug book only had one

	vity to furosemide or it's components	listed) Hypersensitivity to albuterol or it's components	bleeding, severe hypersensitivity to apixaban or it's components	fluticasone or it's components; primary treatment of status asthmaticus or other acute asthma episodes that require intensive measure	listed) Hypersensitivity To allopurinol or it's components
Side Effects/Adverse Reactions (2)	Dizziness, orthostatic hypotension	Anxiety, Angina	Hemorrhagic stroke, GI bleeding	Adrenal insufficiency, Asthma exacerbation	Renal failure, leukopenia

Medications Reference (APA):

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

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 Pt. A/O x4 No distress noted Pt. looked well-groomed and looked appropriate for their age

INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	 Skin color appropriate for ethnicity with several areas of purple/maroon discoloration Skin warm, dry, and intact Skin returns slowly to place No rashes noted Generalized bruising, mostly on right upper arm Incisions to right neck and forearm due to cardiac cath **Braden score: 19** (Pt. able to move themselves in bed and is able to verbalize any pain or discomfort they are in. Pt. is able to use urinal on their own, and is able to call to use the bathroom for BM's) No drains noted
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Head and neck symmetrical. No tracheal deviation. Thyroid rises and falls appropriately. Lymph nodes non-palpable. No hearing deficit note. Ears pink with no drainage noted. Pupils equal (3mm), round, reactive to light and accommodation. Symmetrical EOMs. Conjunctiva pink, no irritation noted. Sclera white. Nose had some dryness and scabs noted in left nostril. Septum intact and no plops noted. Pt. has good oral care, no natural teeth. Dentures are in good condition.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☒ N ☐** **Location of Edema:**	 Normal S1, and S2, sounds. No S3, or S4, sounds noted Irregular apical/radial pulses Radial pulses +2, Dorsal pulses +1 Cap refill less than 3 seconds No JVD noted Trace edema noted in the legs and feet
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	 No use of respiratory muscles noted. Pt. did have a slight non-productive cough. Regular breathing pattern, and breathing was unlabored. Pt. on 4 L of O2. No SOB noted at this time. Diminished breath sounds in RUL, some wheezes on expiration. Diminished breath sounds in RML, RLL, LUL, LLL.

GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	 Pt. states cardiac/diabetic diet NPO 5'9" 235lb Normal bowel sounds in all regions Pt. states Sunday No pain upon palpation, no masses noted No distention noted No incisions noted Scars from hernia repairs in the umbilical and inguinal regions No drains noted No wounds noted
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Pt. uses urinal while in bed but urinates in the toilet when ambulated to the bathroom. Urine appear pale yellow with no distinct smells noted. Pt. stated he was having "frequent voids because of my Lasix" Genitals appear normal
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☒ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	 Normal Pt. able to perform active range of motion with no assistance Pt. uses gait belt when ambulating at the hospital but doesn't use anything at home Pt. is a fall risk due to being on Lasix (high fall risk drug) but is SBA only **Fall score: 14** (Using Johns Hopkins fall assessment tool) Pt. is high fall risk due to being visually impaired (has glasses), is on a high fall risk drug, and has 2 IV sites
NEUROLOGICAL: **MAEW: Y ☒ N☐**	Pt. able to move all extremities without assistance. Pupils are equal, round, reactive to

PERLA: Y ☒ N☐ **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	light and accommodation. Pt. is A&O x4. Cognitive with normal speech pattern. Normal sensory response in fingers and toes .
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Pt. has a very good support system. Wife was present in the room and is involved with the pts. Care and stays educated on pts. Condition. Pt. has several children and grandchildren. To pass time while in the hospital pt. watches T.V and has accesses to his smart phone. Pt. stated that he is not really religious.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0941	70	117/87	20	98.0	96% 4 L O2

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0950	Numerical	N/A	0-10	No pain noted	Not needed at this time

Intake and Output (2 points)

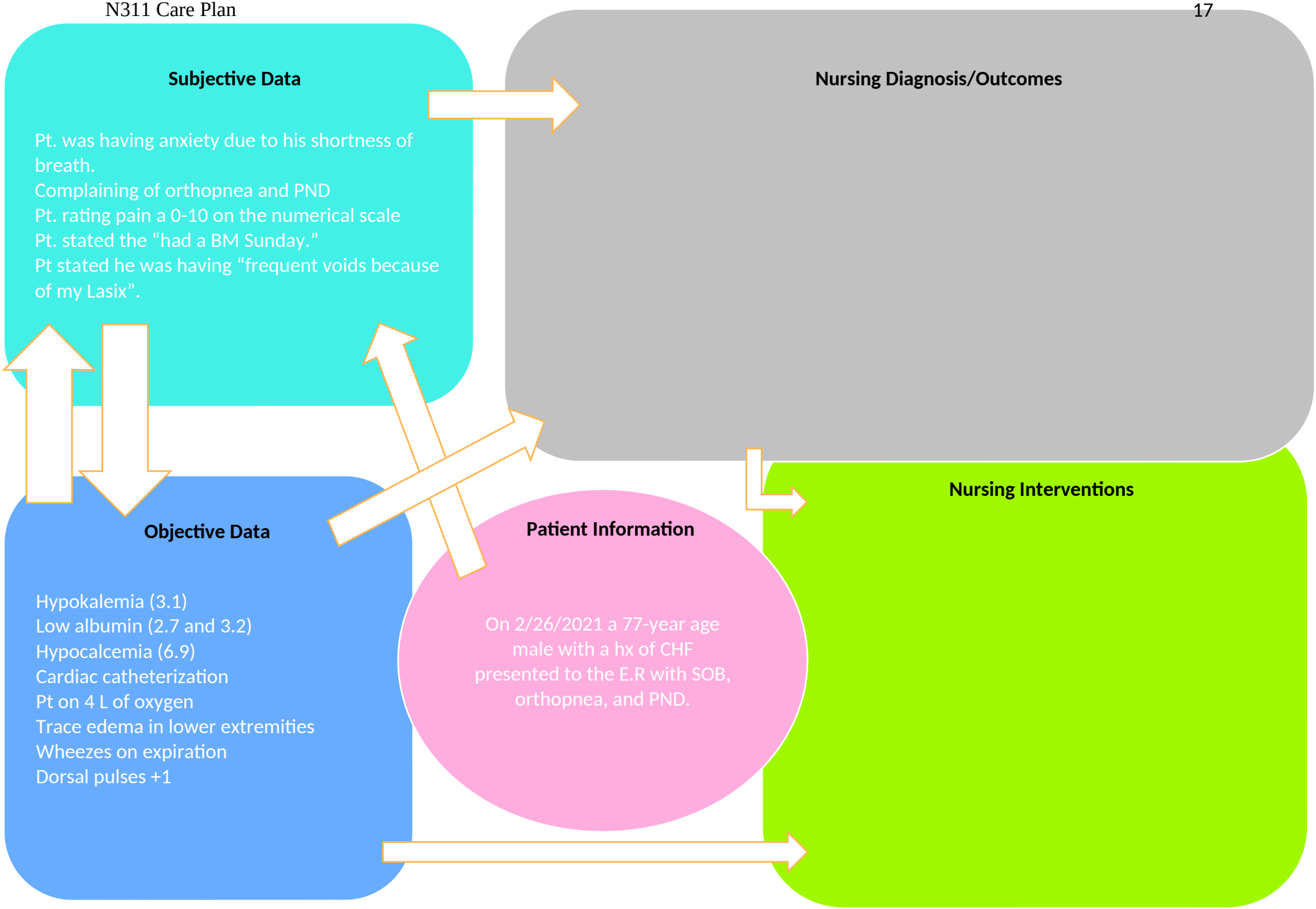
Intake (in mL)	Output (in mL)
NPO	100ml voided in urinal

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Gas exchanged impaired related to CHF/congestion as evidenced by wheezes on expiration, and difficulty breathing.	Pt. came to the E.R with shortness of breath, and upon the physical assessment I heard wheezing in the lungs.	1. Putting pt. in high fowlers position to facilitate maximal inspiration 2. Administer oxygen therapy as ordered	Goal met- Pt. was able to breath more easily in the high fowlers position and pts. Oxygen saturation came up during my shift Goal met- 4 L of oxygen was ordered for the pt. by provider
2. Fluid volume excess related to CHF as evidenced by edema in lower extremities.	During the physical assessment there were trace signs of edema in the lower extremes, pt. complained of dyspnea and pt. has a history of CHF.	1. Changing pts. Position frequently and elevating the feet can help improve edema and promote circulation. 2. Suggest pt. follow a low sodium diet and restrict fluids	Unsure if goal was met- I did elevate pts. Feet while on the floor, but I wasn't there long enough to reassess to see if the edema went down. Goal met- Pt. and his wife both stated at home he tries as best as he can to follow a low sodium diet. They both understood the importance of this diet.

Overall APA format (5 points):

Concept Map (20 Points)


Subjective Data
Pt. was having anxiety due to his shortness of breath.
Complaining of orthopnea and PND
Pt. rating pain a 0-10 on the numerical scale
Pt. stated the "had a BM Sunday."
Pt stated he was having "frequent voids because of my Lasix".
Nursing Diagnosis/Outcomes
Nursing Interventions
Objective Data
Hypokalemia (3.1)
Low albumin (2.7 and 3.2)
Hypocalcemia (6.9)
Cardiac catheterization
Pt on 4 L of oxygen
Trace edema in lower extremities
Wheezes on expiration
Dorsal pulses +1
Patient Information
On 2/26/2021 a 77-year age male with a hx of CHF presented to the E.R with SOB, orthopnea, and PND.