N431 Care Plan #

Lakeview College of Nursing

Name

N431 CARE PLAN

Demographics (3 points)

Date of Admission 4/06/22	Client Initials C.D	Age 95 years old	Gender Male
Race/Ethnicity White/ caucassian	Occupation Retired	Marital Status Married	Allergies Hydrocodone, Vicodin
Code Status DNAR	Height 5’10	Weight 163 lb	

Medical History (5 Points)

Past Medical History: A fib, CHF, Type 2 diabetes mellitus, hypertension, renal failure, myocardial infarction, syncope and collapse

Past Surgical History: Cataract removal with implant, hernia repair

Family History: No history on file

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

Former smoker quit 8/7/1977, never used smokeless, alcohol use not currently, former drinker of 1 can of beer per week

Assistive Devices: N/A

Living Situation: Lives with wife and son.

Education Level: Graduated high school

Admission Assessment

Chief Complaint (2 points): shortness of breath

History of Present Illness – OLD CARTS (10 points): 95 year old male reported to outside with left upper arm weakness and slurred speech. Patient was thought to have an acute ischemic stroke coming in. He was consulted outside of the carle hospital and did not recommend any

further imaging or interventions. Patient had left and lower arm swelling on presentation. Carle had patient get a CT scan and it was negative.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Congestive Heart Failure

Secondary Diagnosis (if applicable): Afib,dysphagia

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

Pathophysiology of the Disease, APA format (20 points): Congestive heart failure works at the pathophysiology level as the heart attempts to adapt by several compensatory mechanisms to try and maintain cardiac output and meet systemic demands. The increased wall stress causes the myocardium to attempt to compensate via eccentric remodeling, which makes the loading conditions and wall stress even worse (Malik et al., 2021). A decrease in cardiac output stimulates the neuroendocrine system with a release of epinephrine, norepinephrine, endothelin-1, and vasopressin (Malik et al., 2021). They cause vasoconstriction leading to inflated afterload. There is an upsurge in cyclic adenosine monophosphate (cAMP), which causes an increase in cytosolic calcium in the myocytes. This increases myocardial contractility, and further stops myocardial relaxation (Malik et al., 2021). Afterload and myocardial contractility with impaired myocardial relaxation leads to more myocardial oxygen demand. This paradoxical need for increased cardiac output to fulfill myocardial demand eventually leads to myocardial cell death and apoptosis. As apoptosis continues, diminished cardiac output with raised demand leads to a perpetuating cycle of increased neurohumoral stimulation and maladaptive hemodynamic and myocardial responses (Malik et al., 2021). A decrease in cardiac output also stimulates the renin-angiotensin-aldosterone system (RAAS), leading to increased salt and water retention, along

with increased vasoconstriction. This additionally fuels the maladaptive mechanisms in the heart and causes progressive heart failure. In addition to this, the RAAS system releases angiotensin II, which has been demonstrated to increase myocardial cellular hypertrophy and interstitial fibrosis. This maladaptive function of angiotensin II has been shown to increase myocardial remodeling (Malik et al., 2021). A physical examination will also show how CHF will affect other body parts with its signs and symptoms. The most common finding in people with CHF is dyspnea. Other findings that are common include chest pain, palpitations, anorexia, and fatigue. Some patients may present with a recumbent cough which may be due to orthopnea (Malik et al., 2021). The classical finding of pulmonary rales translates to heart failure of moderate to severe intensity. Wheezing may be present in acute decompensated heart failure. As the severity of pulmonary congestion increases, frothy and blood-tinged sputum may be seen. Jugular venous distention is another classical finding which must be assessed in all patients with HF. A paradoxical increase in jugular venous distention with respiration (Kussmaul sign) may be seen. In patients with elevated left-sided filling pressures, hepatojugular reflux will be seen. Peripheral edema is present in severe heart failure and will be seen if a substantial degree of volume overload is present (Malik et al., 2021). Renal function should be assessed as a rough guide to the patient's intravascular volume status and renal perfusion. A urinalysis is helpful in the assessment of the patient's volume status. Electrolyte assessment and the correction of electrolyte disturbances such as hypokalemia, hyperkalemia, and hypomagnesemia are critical in those patients treated with diuretics. Hyponatremia (due to poor stimulation of the baroreceptors and appropriate ADH release and free water retention) is associated with a poor prognosis. A complete blood count should be obtained to assess for the presence of anemia which may exacerbate heart failure, and to assess the patient's coagulation status, which may be impaired

due to hepatic congestion. Natriuretic peptides: BNP or NT-proBNP are important in diagnosing heart failure. An electrocardiogram should also be performed in all heart failure patients; Troponin level- if there is concern that myocardial injury is the cause for symptoms (King, 2021). The primary combination therapy for CHF includes diuretics, a renin-angiotensin system inhibitor (such as an angiotensin receptor neprilysin inhibitor (ARNI), angiotensin-converting enzyme (ACE) inhibitor, or angiotensin II receptor blockers (ARB)), and a beta-blocker. The combination of hydralazine and nitrate is an alternative to an angiotensin system blocker for primary therapy if ACE inhibitor, ARNI, and ARB therapies are contraindicated. Digoxin may be considered in symptomatic patients in sinus rhythm despite adequate goal-directed therapy to reduce the all-cause rate of hospitalizations, but its role is limited (Malik et al., 2021). The patient had to get an CT scan on his chest. The patient came in because of shortness of breath,slurred speech, weakness. Upon physical examination, the patient had a very swollen left and right arm that could be identified as +1 edema.

Pathophysiology References (2) (APA):

Malik, A., Brito, D., Vaquar, S., & Chhabra, lovley. (2021, November 2). *Congestive Heart Failure - StatPearls - NCBI Bookshelf*. National Center for Biotechnology Information. https://www.ncbi.nlm.nih.gov/books/NBK430873/

King, K. (2021, September 21). *Congestive Heart Failure And Pulmonary Edema Article*. StatPearls; StatPearls Publishing. https://www.statpearls.com/ArticleLibrary/viewarticle/19880

Laboratory Data (15 points)

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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	3.16	2.74	The patient is diagnosed with CHF which causes anemia, making the RBC lower (Capriotti,2020).
Hgb	12.0-18.0	10.8	9.4	Hemoglobin is a major substance in RBC, patients who has anemia causes Hgb to be low (Capriotti,2020).
Hct	37-51%	30.6	28.9	HCT is low due to an insufficient supply healthy red blood cells which is anemia (Capriotti,2020).
Platelets	140-400	135	134	Patient is on blood thinners cause platelets to be low (Capriotti,2020).
WBC	4-11	6.44	9.48	
Neutrophils	1.60-7.70	4.38	7.56	
Lymphocytes	%	16.0	5.8	
Monocytes	%	12.7	10.7	
Eosinophils	%	2.0	6.0%	
Bands	N/A	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	143	143	
K+	3.5-5.1	3.5	3.8	
Cl-	98-107	109	107	
CO2	22.0-29.0	23.0	22.0	
Glucose	74-100	160	153	Patient has diabetes which might have been going uncontrolled at the time of hospital admission (Capriotti,2020).

BUN	8-26	28	83	Patient has renal failure cause BUN to elevated (Capriotti,2020).
Creatinine	0.55-1.30	2.04	3.08	Patient has renal failure causes creatinine to increase (Capriotti,2020).
Albumin	3.4-4.8	2.2	1.9	Patient has renal failure causes albumin to be low (Capriotti,2020)
Calcium	8.9-10.6	8.3	7.8	Patient has renal failure causes calcium to be low (Capriotti,2020)
Mag	1.6-2.6	1.5	2.3	
Phosphate	N/A	N/A	N/A	
Bilirubin	N/A	N/A	N/A	
Alk Phos	40-150	134	94	
AST	5-34	23	21	
ALT	0-55	28	32	
Amylase	N/A	N/A	N/A	
Lipase	N/A	N/A	N/A	
Lactic Acid	N/A	N/A	N/A	
Troponin	N/A	N/A	N/A	
CK-MB	N/A	N/A	N/A	
Total CK	N/A	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	2.9	N/A	Patients taking blood thinner causes INR to be higher (Capriotti,2020).
PT	11.7-13.8	30.1	N/A	Patients taking blood thinner causes

				PT higher (Capriotti,2020).
PTT	N/A	N/A	N/A	
D-Dimer	N/A	N/A	N/A	
BNP	N/A	N/A	N/A	
HDL	N/A	N/A	N/A	
LDL	N/A	N/A	N/A	
Cholesterol	N/A	N/A	N/A	
Triglycerides	N/A	N/A	N/A	
Hgb A1c	4.0-7.0%	5.1	N/A	
TSH	N/A	N/A	N/A	

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

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity				
pH				
Specific Gravity				N/A
Glucose				N/A
Protein				N/A
Ketones				N/A
WBC				N/A
RBC				N/A
Leukoesterase				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				N/A
PaO2				N/A
PaCO2				N/A
HCO3				N/A
SaO2				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
Blood Culture				N/A
Sputum Culture				N/A
Stool Culture				N/A

Lab Correlations Reference (1) (APA):

Capriotti, T. (2020). *Davis Advantage for Pathophysiology*. F.A Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Patient had a CT scan.

Diagnostic Test Correlation (5 points): A computerized tomography (CT) scan or or a magnetic resonance imaging (MRI) test may be required. These tests are more effective than x-rays at

showing the soft tissues in your spine and can help to identify problems such as a bulging disc or a herniated disc (Highsmith,2020).

Diagnostic Test Reference (1) (APA):

Highsmith, J. (2020). *Degenerative Disc Disease Diagnosis | Exams and Tests for DDD.* SpineUniverse. https://www.spineuniverse.com/conditions/degenerative-disc/exams tests-degenerative-disc-disease

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

Home Medications (5 required)

Brand/Generic	Warfarin (Coumadin)	Tamsulosin (Flomax)	Nitroglycerin (Nitrostat)	Glipizide (Glucotrol)	Cyanocobalamin
Dose	2.5 mg	0.4mg	0.4 mg	2.5mg	2500 mg
Frequency	Daily	Daily	2x daily	Daily	Daily
Route	Oral	Oral	sublingual	oral	Oral
Classification	Courain derivative Anticoagulant	Alpha Adrenergic antagonist Benign prostatic hyperplasia agent	Nitrate Antianginal vasodilator	Sulfonylurea Antidiabetic	Vitamin B12
Mechanism of Action	Interferes	Blocks	interact with	Stimulates	Tissues

	with the ability to synthesize vitamin K-dependent clotting enzyme (Capriotti, 2020)	alpha-adrenergic receptors in the prostate (Capriotti, 2020).	nitrate receptors in vascular smooth muscle cell membranes (Capriotti, 2020).	insulin from beta cells in pancreas (Capriotti, 2020).	absorb vitamin B12 by specific B12 binding proteins, transcobalamin I and II
Reason Client Taking	Prevent MI (Capriotti, 2020)	Improves rate of urine and reduces symptoms of BPH	prevent acute anginal attacks.	Patient has type 2 diabetes	Treat vitamin B-1`2
Contraindications (2)	Bleeding, cerebral or dissecting aneurysm.	Hypersensitivity to tamsulosin, hypertension (Capriotti, 2020)	Acute MI, Angle closure glaucoma	Hypersensitivity Type 1 diabetes	Patient on antibiotics Pregnancy
Side Effects/Adverse Reactions (2)	Coma, Hypotension	Asthenia, dizziness (Capriotti, 2020)	hypotension, abdominal pain	Blurred vision Hypoglycemia	Abnormal stomach pain Chest pain
Nursing Considerations (2)	Avoid IM injections during warfarin therapy Monitor INR in patient	Rule out prostate cancer before given Give drug 30 minutes after the same meal each day	Place under the patient's tongue Place patient in sitting position for SL use (Capriotti, 2020)	Check blood glucose level level at least 3 times daily(Capriotti, 2020). Monitor fasting glucose to check response to the drug	Assess patients for signs of vitamin B12 deficiency. Montor plasma folic acid.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	INR and PT	Check Blood pressure, Check patient for	Monitor Blood pressure every 5 minutes at	Check blood sugar before giving	Check the Patients vitamin B12 lab

		prostate cancer (Capriotti, 2020)	start. Monitor all vital signs frequently	Check glucose lab before giving	Check to see if the patient has anemia
Client Teaching Needs (2)	Take drug at the same time everyday. Avoid alcohol while on this drug	Instruct patient not to chew, crush capsules Change position slowly after initial dose and each dosage increase.	Teach patient to recognize signs and symptoms of angina pectoris For SL use do not swallow and place it under the tongue.	Advise patient not to skip doses of medication. Urge patient to report evidence of hypoglycemia.	Teach the patient that Vitamin B-12 is incompatible with many drugs. Vitamin B-12 is light sensitive.

Hospital Medications (5 required)

Brand/Generic					
Dose					
Frequency					
Route					
Classification					
Mechanism of Action					
Reason Client Taking					
Contraindications (2)					
Side Effects/Adverse Reactions (2)					
Nursing					

Considerations (2)					
Key Nursing Assessment(s)/Lab(s) Prior to Administration					
Client Teaching Needs (2)					

Medications Reference (1) (APA):

Capriotti, T. (2020). *Davis Advantage for Pathophysiology*. F.A Davis Company.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: Alertness: A&O x3 Orientation:Oriented to place,time,person not current events Distress:Patient appeared to be in some pain Overall appearance: Well groomed	
INTEGUMENTARY: Skin color: White, normal for race Character: hydrated, bruises on arm, very swollen on both arms Temperature: warm/normal Turgor:rapid recoil Rashes:none Bruises: bruised up on left arm Wounds: .sacreal spine wound	

Braden Score: 10 Drains present: Y☐ N ☐ No Type:	
HEENT: Head/Neck: symmetrical, No lesion or rashes noted Ears: Auricle pink, moist with no rashes or lesions noted Eyes: Sclera white, Cornea clear, conjunctiva pink, no lesions or discharged noted Nose: Septum midline. No drainage or bleeding noted. Teeth: Pt has no natural teeth,	.
CARDIOVASCULAR: Heart sounds: Faint sounding heart sound clear S1,S2, no gallops,murmurs, or rubs S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses:62 Capillary refill: <3 Neck Vein Distention: Y ☐ N ☐ No Edema Y ☐ N ☐ Yes Location of Edema: Both of the arms	.
RESPIRATORY: Accessory muscle use: Y☐ N ☐ No Breath Sounds: Location, character Nonlabored breathing. No wheezes or crackles noted in auscultation	.
GASTROINTESTINAL: Diet at home: low sodium Current Diet NPO Height: 5'10 Weight: 163 lb Auscultation Bowel sounds: Bowel sounds: present in all four Last BM: N/A patient unresponsive Palpation: Pain, Mass etc.: No pain or masses noted Inspection: No lesions or rashes Distention: No distention noted Incisions: No incisions noted Scars: No scars noted Drains: No drains Wounds: No wounds	.

Ostomy: Y ☐ N ☐ No Nasogastric: Y ☐ N ☐ No Size: Feeding tubes/PEG tube Y ☐ N ☐ Yes Type:	
GENITOURINARY: Color: Yellow Character: Nurse reported no cloudiness or sediment Quantity of urine: Pt did not use bathroom while I was there Pain with urination: Y ☐ N ☐ No Dialysis: Y ☐ N ☐ No Inspection of genitals: Catheter: Y ☐ N ☐ Yes Type:External catheter Size: N/A	
MUSCULOSKELETAL: Neurovascular status: aware of situation and status ROM: Patient can move lower extremities, generalized weakness Supportive devices: Pt will need a full care giver Strength: Generalized weakness ADL Assistance: Y☐ N ☐ Yes Fall Risk: Y ☐ N☐ Yes Fall Score: 60 Activity/Mobility Status: Patient is immobile to move Independent (up ad lib) ☐ Needs assistance with equipment ☐ Yes Needs support to stand and walk☐	.
NEUROLOGICAL: MAEW: Y ☐ N☐ No PERLA: Y ☐ N☐ No Strength Equal: Y ☐ N ☐ if no - Legs not equal strength Legs ☐ Arms ☐ Both ☐ Orientation: A&0 x 3 Mental Status: Aware of situation, less alert Speech: slurred speech Sensory: Reflexes present LOC: Awake	.
PSYCHOSOCIAL/CULTURAL:	.

Coping method(s): N/A Developmental level: Adult Religion & what it means to pt.: Pt could not tell me Personal/Family Data (Think about home environment, family structure, and available family support): Patient has a wife and a son.	

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0229	58	105/68	20	97.1 F	74
0724	62	90/49	20	97.1 F	97

Vital Sign Trends: Patients' vitals were stable and showed no abnormal changes.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0835	0	0	0	0	0
1030	Pt could not give score	Left arm	Severe	Patient yelled when Iv was inserting to the arm	None at the moment

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV:22 G Location of IV: Lower right arm Date on IV: 4/13/22 Patency of IV: Patent Signs of erythema, drainage, etc.: None	IV solution 100 mL/hr

IV dressing assessment: Clean and dry	

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
200 mL	0 mL

Nursing Care

Summary of Care (2 points)

Overview of care: Patient received medication and adjustment in bed.

Procedures/testing done: No procedures today.

Complaints/Issues: Patient had no complaints or issues.

Vital signs (stable/unstable): Patient's vital signs were stable

Tolerating diet, activity, etc.: Patient is NPO because currently cannot swallow, has a catheter because immobile.

Physician notifications: Patient will need to go to a EFC facility

Future plans for client: EFC facility

Discharge Planning (2 points)

Discharge location: Family is still undecided but they are pushing for the EFC facility

Home health needs (if applicable): Patient will be total care

Equipment needs (if applicable): Patient will need a bed, pump machine, etc

Follow up plan: N/A

Education needs: Family will need to be educated on how to take of patient if they decide to take him home

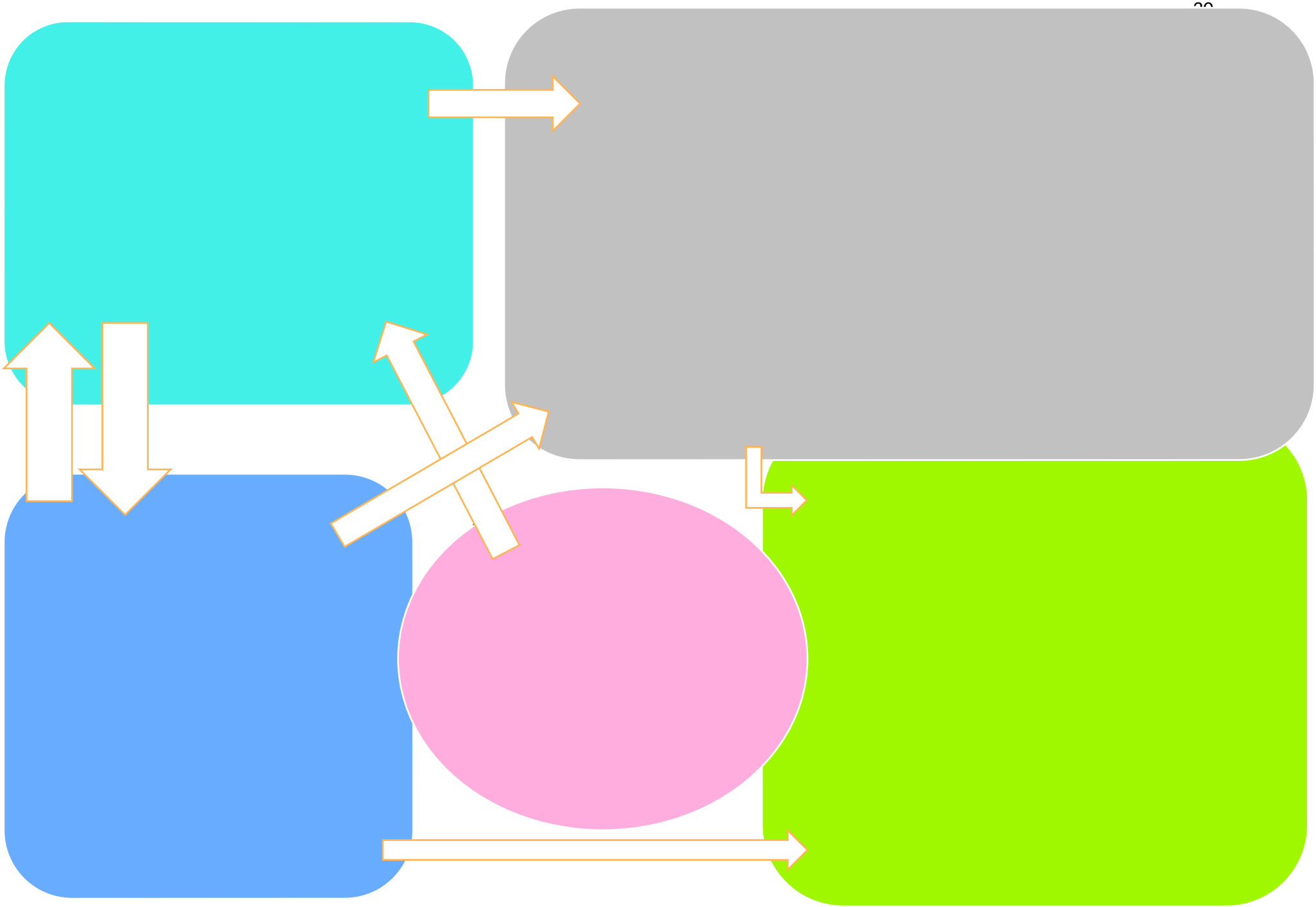
Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis ● Include full nursing diagnosis with "related to" and "as evidenced by" components ● Listed in order by priority – highest priority to lowest priority pertinent to this client	Rationale ● Explain why the nursing diagnosis was chosen	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation ● How did the client/family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Decreased cardiac output related to altered myocardial contractility changes evidenced by decreased urine output	Patient had a decrease in urine output and has CHF.	1. Note heart sounds 2. Auscultate apical pulse, assess heart rate	1. Patient will demonstrate cardiac output by vital signs within acceptable ranges	Patient is willing to participate in activities that reduce cardiac workload
2. Excess fluid volume related to reduced glomerular filtration rate evidenced by Edema,	Patient has edema in both his arms admission.	1. Monitor urine output, noting amount and color, as well as the time of day 2. Monitor and calculate 24-hour intake and output balance	1. Demonstrate stabilized fluid volume with balanced intake and output,	Patient is willing to participate and notify nurse when urinating

3. Impaired skin integrity related to Edema, decreased tissue evidenced by edema in patients' arms	Patient has edema in both of his arms	1. 1.Inspect skin, noting skeletal prominences, presence of edema, areas of altered circulation, or obesity and/or emaciation 2. Check	1. Maintain skin integrity	Patient is glad that he will have someone looking at his edema
4. Acute pain related to decreased myocardial blood flow evidenced by patient complaining of pain in his arm.	Patient complained of pain in his arm.	1. Assess patient pain for intensity using a pain rating scale, location, and precipitating factors 2. Assess the response to medications every five minutes	1. Patients pain will be decreased	Patient will follow plans as advised. Wants to decrease his pain.

Other References (APA):

Concept Map (20 Points):



Subjective data: Patient reported a sharp pain in his arm by yelling when IV medication was being pushed. Patient was A&O x3.

Nursing diagnosis/outcomes: Decreased cardiac output related to altered myocardial contractility changes evidenced by decreased urine output- Patient is willing to participate in activities that reduce cardiac workload. Excess fluid volume related to reduced glomerular filtration rate evidenced by Edema, - Patient is willing to participate and notify nurse when urinating. Impaired skin integrity related to Edema; decreased tissue evidenced by edema in patients' arms- Patient is glad that he will have someone looking at his edema. Acute pain related to decreased myocardial blood flow evidenced by patient complaining of arm pain- Patient will follow plans as advised. Wants to decrease his pain

Nursing interventions: Note heart sounds, auscultate apical pulse, assess heart rate. Monitor urine output, noting amount and color, as well as the time of day, Monitor and calculate 24-hour intake and output balance .Inspect skin, noting skeletal prominences, presence of edema, areas of altered circulation, or obesity and/or emaciation. Check the response to medications every five minutes. Assess patient pain for intensity using a pain rating scale, location, and precipitating factors, Assess the response to medications every five minutes.

Client Information: Patient is a white retired 95-year-old male. Height is 5’10, weight is 163 pounds.

Objective information: Patient has chronic heart failure, renal failure, anemia, and hypertension. Patient has abnormal lab values of RBC,Hgb,Hct,Platelets,Glucose,BUN,Creatinine. Patient had a CT scan that was negative.