

N441 Care Plan  
Lakeview College of Nursing  
Kimberly Sanchez

**Demographics (3 points)**

<b>Date of Admission</b> 1/29	<b>Patient Initials</b> TW	<b>Age</b> 61	<b>Gender</b> F
<b>Race/Ethnicity</b> Caucasian	<b>Occupation</b> Retired/ Disabled	<b>Marital Status</b> Single	<b>Allergies</b> No known allergies
<b>Code Status</b> Full	<b>Height</b> 149.86cm	<b>Weight</b> 126.6kg	

**Medical History (5 Points)**

**Past Medical History:** Arthritis, Asthma, Chronic pain, Chronic obstructive pulmonary disease (COPD), Gout, Hypertension (HTN), and Psoriatic arthritis (HCC)

**Past Surgical History:** Total Knee Arthroplasty (Left); Hysterectomy; Carpal Tunnel Release (Bilateral); and Cholecystectomy.

**Family History:** Mother: none; Father: HTN; Paternal Grandfather: HTN, Parkinson's; Sister: coronary artery disease

**Social History (tobacco/alcohol/drugs):** Client denied use of alcohol or drugs; Former tobacco user, 2 packs a day for 40 years (80 pack years).

**Assistive Devices:** No assistive devices

**Living Situation:** The client lives alone.

**Education Level:** Highschool graduate

**Admission Assessment**

**Chief Complaint (2 points):** Chest pain

**History of present Illness (10 points):** The client is a 61-year-old female who began feeling acute chest pain January twenty-ninth and decided to go to the local hospital. The pain came on suddenly, was left-sided, and constant. She also experienced jaw pain and fatigue but denied any other associated symptoms. Client reported "too much" movement as an aggravating factor. She

did not attempt to relieve her chest pain with medication. She receives treatment for her hypertension but has never been seen for cardiac conditions.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points): NSTEMI**

**Secondary Diagnosis (if applicable):**

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

**What is a non-ST-elevation myocardial infarction (NSTEMI):**

A myocardial infarction (MI), commonly known as a heart attack, is caused by a lack of oxygen that eventually leads to tissue death. Myocardial ischemia is often caused by a blockage, an atherosclerotic plaque that ruptures and reduces blood flow to the coronary artery. Once a plaque ruptures it increases the chance of a thrombus forming, a complete occlusion of the artery, which then results in necrosis of the artery (Cheever & Hinkle, 2020). Other causes of MIs include vasospasm, decreased oxygen supply, and an increased oxygen demand such as ingestion of cocaine or thyrotoxicosis. Myocardial infarctions are often classified as a non-ST-elevation myocardial infarction (NSTEMI) or ST-segment elevation myocardial infarction (STEMI) in which the ST wave exhibits changes during an (electrocardiogram) EKG. Risk factors such as chronically elevated high cholesterol and hypertension, diet, exercise, tobacco, and a family history of heart disease contribute to a person's likelihood of experiencing an MI.

**Signs and symptoms of:**

A person experiencing an MI may feel the classic symptoms or be asymptomatic. Signs and symptoms of an MI include: diaphoresis, dyspnea, anxiety, Levine's sign (fist to chest),

pallor, retrosternal crushing chest pain that radiates to shoulder, arm, jaw, or back, and weak pulses (Capriotti, 2020).

**How is diagnosed:**

Diagnosis of a myocardial infarction occurs through blood labs that target specific cardiac makers and an EKG (Cheever & Hinkle, 2020). An EKG can identify if an MI is happening or if has already occurred by observing ST elevation and depression, but this tool alone cannot provide a definitive diagnosis. Cardiac markers used to diagnose an MI are CPK-MB and troponin. CPK-MB rises within four hours (Capriotti, 2020). Troponin is a specific indicator of muscle necrosis that rises at four to eight hours after the onset of pain (Capriotti, 2020). After an MI the body may experience a spike in potassium and lactic acid (Capriotti, 2020).

**Treatment of :**

The goal of treating and MI focuses on reestablishing adequate blood flow to prevent further necrosis (Cheever & Hinkle, 2020). As soon as a person walks into the emergency room for an MI they may be given antiplatelet medication such as aspirin, nitroglycerine, and placed on oxygen (Capriotti, 2020). The client may then receive thrombolytic therapy or percutaneous coronary intervention (PCI) with potential stent placement (Capriotti, 2020). Thrombolytic therapy is initiated within thirty minutes of arrival, while PCIs are preferably done within ninety minutes of arrival (Cheever & Hinkle, 2020). Before PCIs, clients are placed on anticoagulant medication such as heparin or enoxaparin (Cheever & Hinkle, 2020)

**How relates to the patient:**

The client, TW, is a sixty-one-year-old Caucasian female with a history of hypertension (HTN) and a forty-year tobacco history who suffered an MI. She felt a sudden onset of chest pain

and immediately sought medical attention. She then experienced jaw pain. She had an EKG, elevated troponins, and was then placed on heparin and a nitroglycerine drip. The client then received a PCI and had a stent placed.

### Pathophysiology References (2) (APA):

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

Cheever, K. H., & Hinkle, J. L. (2020). *Brunner and Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

### 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	3.8-5.3	4.91	4.96	
Hgb	12.0-15.8	14.6	14.5	
Hct	36.0-47.0	42.7	43.8	
Platelets	140-440	261	238	
WBC	4.00-12.0	9.7	12.20	WBC elevate when there inflammation and when infarction has occurred (Cheever & Hinkle, 2020).
Neutrophils	47.0-73.0	72.7	n/a	
Lymphocytes	18-42	19.3	n/a	
Monocytes	4.0-12.0	6.9	n/a	
Eosinophils	0.0-5.0	0.10	n/a	
Bands	<10%	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-	133-144	139	134	
<b>K+</b>	3.5-5.1	<b>2.9</b>	<b>3.4</b>	An adverse effect of hydrochlorothiazide is Hypokalemia (Jones & Bartlett Learning, 2021).
Cl-	98-107	100	101	
CO2	21-31	30	25	
<b>Glucose</b>	70-99	<b>155</b>	<b>145</b>	The likely cause of the clientAn adverse effect of hydrochlorothiazide and atorvastatin is hyperglycemia (Jones & Bartlett Learning, 2021).
BUN	7-25	12	21	
Creatinine	0.50 - 1.20	1.07	1.18	
Albumin	3.7-5.7	3.8	n/a	
<b>Calcium</b>	8.6-10.3	<b>10.6</b>	<b>10.9</b>	An adverse effect of hydrochlorothiazide is hypercalcemia(Jones & Bartlett Learning, 2021).
Mag	1.6-2.6	1.8	n/a	
Phosphate	3.5-4.5	n/a	n/a	
Bilirubin	0.2-0.8	0.8	n/a	
Alk Phos	34-104	95	n/a	
AST	17-59	26	n/a	

<b>ALT</b>	<b>0-49</b>	<b>19</b>	<b>n/a</b>	
<b>Amylase</b>	<b>25–125 U/L</b>	<b>n/a</b>	<b>n/a</b>	
<b>Lipase</b>	<b>11-82</b>	<b>n/a</b>	<b>n/a</b>	
<b>Lactic Acid</b>	<b>0.5-2.0</b>	<b>n/a</b>	<b>n/a</b>	
<b>Troponin</b>	<b>0.00-0.040</b>	<b>5.480</b>	<b>n/a</b>	The client's troponin was elevated due to her myocardial infarction (Cheever & Hinkle, 2020).
<b>CK-MB</b>	<b>5 to 25 IU/L</b>	<b>n/a</b>	<b>n/a</b>	
<b>Total CK</b>	<b>22 to 198 U/L</b>	<b>n/a</b>	<b>n/a</b>	

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

<b>Lab Test</b>	<b>Normal Range</b>	<b>Value on Admission</b>	<b>Today's Value</b>	<b>Reason for Abnormal</b>
<b>INR</b>	<b>0.8-1.1</b>	<b>1.0</b>	<b>n/a</b>	
<b>PT</b>	<b>10.1-13.1</b>	<b>11.8</b>	<b>n/a</b>	
<b>PTT</b>	<b>25-36</b>	<b>39</b>	<b>n/a</b>	Prolonged in those undergoing heparin therapy (Cheever & Hinkle, 2020).
<b>D-Dimer</b>	<b>0-622</b>	<b>n/a</b>	<b>n/a</b>	
<b>BNP</b>	<b>0-100</b>	<b>n/a</b>	<b>n/a</b>	
<b>HDL</b>	<b>&gt;40</b>	<b>41</b>	<b>n/a</b>	
<b>LDL</b>	<b>&lt;130</b>	<b>110</b>	<b>n/a</b>	
<b>Cholesterol</b>	<b>&lt;200</b>	<b>184</b>	<b>n/a</b>	
<b>Triglycerides</b>	<b>&lt;150</b>	<b>166</b>	<b>n/a</b>	The client has a history of uncontrolled lipids caused by her at home diet which elevate her triglycerides (Cheever & Hinkle, 2020).
<b>Hgb A1c</b>	<b>4.0-6.0%</b>	<b>n/a</b>	<b>n/a</b>	

TSH	0.27-4.2	n/a	n/a	
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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	Clear Yellow	n/a	n/a	
pH	5.0-9.0	n/a	n/a	
Specific Gravity	1.003-1.03	n/a	n/a	
Glucose	negative	n/a	n/a	
Protein	Negative	n/a	n/a	
Ketones	Negative	n/a	n/a	
WBC	Negative 0-5	n/a	n/a	
RBC	Negative 0-2	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	
PaO <sub>2</sub>	80-100	n/a	n/a	
PaCO <sub>2</sub>	35-45	n/a	n/a	

<b>HCO3</b>	<b>22-26</b>	<b>n/a</b>	<b>n/a</b>	
<b>SaO2</b>	<b>95-100</b>	<b>n/a</b>	<b>n/a</b>	

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

<b>Test</b>	<b>Normal Range</b>	<b>Value on Admission</b>	<b>Today's Value</b>	<b>Explanation of Findings</b>
<b>Urine Culture</b>	<b>No Growth</b>	<b>n/a</b>	<b>n/a</b>	
<b>Blood Culture</b>	<b>No Growth</b>	<b>n/a</b>	<b>n/a</b>	
<b>Sputum Culture</b>	<b>No Growth</b>	<b>n/a</b>	<b>n/a</b>	
<b>Stool Culture</b>	<b>No Growth</b>	<b>n/a</b>	<b>n/a</b>	

**Lab Correlations Reference (1) (APA):**

Cheever, K. H., Hinkle, J. L. (2020). *Brunner and Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

Jones & Bartlett Learning. (2021). *2021 Nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

### **Diagnostic Imaging**

**All Other Diagnostic Tests (5 points):**

- **Electrocardiogram (EKG) 12 Lead-** is a representation of electrical currents of the heart used to detect abnormalities such as arrhythmias (Cheever & Hinkle, 2020).
- **Chest X ray-** uses x-rays to see the structures and organs located inside the chest (Cheever & Hinkle, 2020).

- **Left Cardiac Catheterization & Left Ventriculography-** is a procedure performed on the heart and great vessels to diagnose structural and functional problems. Specifically, left cardiac catheterization is performed through the right brachial artery (RCA) to assess the aortic arch, coronary arteries, left ventricle, and the mitral and aortic valves (Cheever & Hinkle, 2020). During the catheterization, a left ventriculography was performed to determine the size of the left ventricle by injecting 30 mL of contrast (Cheever & Hinkle, 2020). Catheterization helps to decide treatment and determining the need for revascularizing procedures such as percutaneous coronary intervention (PCI) and coronary artery bypass grafting (CABG).
- **Coronary angiography-** is used to view the structure of the coronary artery and determine the severity of stenosis from atherosclerosis (Cheever & Hinkle, 2020). The procedure is performed by placing a catheter into both coronary arteries and injecting contrast (Cheever & Hinkle, 2020). While in place the team can perform percutaneous coronary intervention (PCI) or percutaneous transluminal coronary angioplasty (PTCA).
- **Percutaneous coronary intervention (PCI) and percutaneous transluminal coronary angioplasty (PTCA):** PCI is a procedure where a catheter goes into the coronary artery to reduce a blockage (Cheever & Hinkle, 2020). The PTCA is a type of PCI that uses a balloon to break an atheroma and open the vessel (Cheever & Hinkle, 2020). The objective is to improve blood flow the coronary artery. During the PCI, a stent may be put in place.
- **Drug-Eluting Coronary artery stent:** Stents are placed in the coronary artery to provide structural support to prevent a closure, or a restenosis, post PTCA. Stents are metal meshes that expand and support the vessel wall by holding it open (Cheever & Hinkle, 2020). Drug-

Eluting stents are coated with medication to decrease the chance of thrombi or scar tissue formation (Cheever & Hinkle, 2020).

**Diagnostic Test Correlation (5 points):**

- **12 Lead EKG-** 12 Lead EKG was ordered because the client had chest pain. EKGs are graphical representation of the rate and rhythm of the heart in patients with chest pain to aid in diagnosing heart failure. Client was found to have an ectopic atrial rhythm, nonspecific T wave abnormality, and an overall abnormal ECG.
- **Chest X ray-** Chest X ray was ordered due to chest pain. The x-ray found soft tissue attenuation, cardiomegaly, atherosclerotic aorta, and no acute airspace disease.
- **Left Cardiac Catheterization & Left Ventriculography-** This procedure was ordered due to the client's chest pain and NSTEMI. The procedures detected severe three-vessel coronary artery disease with stenosis in the mid-RCA with ninety-nine percent narrowing with a thrombolysis in Myocardial Infarction (TIMI) 2 flow. The recommendation was a possible CABG; the team eventually went with a PCI.
- **Coronary angiography-** was performed to determine the severity of stenosis from atherosclerosis after the last procedure found detected severe three-vessel coronary artery disease; while in place the team was then able to perform a PTCA and insert a stent.
- **Percutaneous coronary intervention (PCI) and percutaneous transluminal coronary angioplasty (PTCA):** was performed to reduce a subtotal occlusion of the right coronary artery utilizing balloon angioplasty. They also found severe two vessel disease in the client's left anterior descending artery (LAD) and the left circumflex with a TIMI 3 flow in both vessels.

- **Drug-Eluting Coronary artery stent:** placed following a PTCA to prevent restenosis, deploying 2 stents which were post dilated distally with 4 mm noncompliant balloon and proximally with 4.5 mm noncompliant balloon with stent expansion and opposition 0% residual and TIMI 3 flow.

**Diagnostic Test Reference (1) (APA):**

Cheever, K. H., Hinkle, J. L. (2020). *Brunner and Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

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

**Home Medications (5 required)**

<b>Brand/Generic</b>	<b>Allopurin-ol ZYLOPRIM</b>	<b>KDur Potassium chloride</b>	<b>Gabapenti n Neurontin</b>	<b>Aspirin Bayer</b>	<b>budesonide- formoterol fumarate Symbicort</b>
<b>Dose</b>	400mg	20mEq	300mg	81mg	4.5mcg/act
<b>Frequency</b>	Twice Daily	Oral	Nightly	Daily	Twice daily
<b>Route</b>	PO	Twice daily	PO	PO	Intranasal
<b>Classification</b>	therapeutic class: Antihyperuricemic agent, antimetabolite  Pharm: Xanthine oxidase inhibitor  (Jones & Bartlett Learning, 2021).	Therapeutic: mineral and electrolyte replacements/supplement  Pharm: potassium bicarbonate  (Jones & Bartlett Learning, 2021).	Therapeutic : analgesic adjuncts  Pharmacologic anticonvulsants.  Jones & Bartlett Learning, 2021).	Therapeutic : antiplatelet agents  Pharmacologic: salicylates  (Jones & Bartlett Learning, 2021).	Therapeutic: steroidal anti-inflammatory agents  Pharmacologic: corticosteroids  (Jones & Bartlett Learning, 2021).

<p><b>Mechanism of Action</b></p>	<p>reduces serum uric acid by inhibiting xanthine oxidase, the enzyme responsible for conversion of xanthine to uric acid</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Maintain acid-base balance, isotonicity, and electrophysiologic balance of the cell.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>transport of amino acids across neuronal membranes</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>inhibiting the production of prostaglandins</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Potent, locally acting anti-inflammatory and immune modifier</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Reason Client Taking</b></p>	<p>Gout</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Replacement. Prevention of deficiency.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Restless leg syndrome</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Prophylaxis of transient ischemic attacks and MI.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>COPD maintenance therapy</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Contraindications (2)</b></p>	<p>Increased serum didanosine level</p> <p>known hypersensitivity to allopurinol</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Hypomagnesemia</p> <p>Hyperkalemia</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Geriatric: May be more susceptible to toxicity</p> <p>Hypersensitivity</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Increasing risk of bleeding</p> <p>Hypersensitivity to aspirin</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Hypersensitivity.</p> <p>Active untreated infections</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Side Effects/Adverse Reactions (2)</b></p>	<p>Increased liver enzymes</p> <p>Increased alkaline phosphatase</p>	<p>Paralysis</p> <p>Paresthesia</p> <p>(Jones &amp;</p>	<p>CV: hypertension.</p> <p>Anxiety</p>	<p>GI bleed</p> <p>Rash</p> <p>(Jones &amp;</p>	<p>nasopharyngeal fungal infection, pharyngitis</p>

	(Jones & Bartlett Learning, 2021).	Bartlett Learning, 2021).	(Jones & Bartlett Learning, 2021).	Bartlett Learning, 2021).	dry mouth, dyspepsia  (Jones & Bartlett Learning, 2021).
<b>Nursing Considerations (2)</b>	Monitor I & O  encourage adequate fluid intake ( $\geq$ 2–3 L/day)  (Jones & Bartlett Learning, 2021).	Monitor for toxicity.  Administer with or after meals to decrease GI irritation.  (Jones & Bartlett Learning, 2021).	Monitor for seizures  Monitor for thoughts of suicide  (Jones & Bartlett Learning, 2021).	Use lowest effective dose  Give after meals or with food  (Jones & Bartlett Learning, 2021).	Monitor degree of nasal stuffiness, amount and color of nasal discharge, and frequency of sneezing.  •Patients on long-term therapy should have periodic otolaryngologic examinations to monitor nasal mucosa and passages for infection or ulceration.  (Jones & Bartlett Learning, 2021).
<b>Key Nursing Assessment(s)/ Lab(s) Prior to Administration</b>	Assess serum uric acid, plasma oxypurinol, CBC, and liver/renal	Assess for signs and symptoms of hypokalemia & hyperkalemia	May cause false-positives when testing urinary	Monitor liver function  Monitor Hematocrit	Assess heart rate prior  Assess respirations

	<p>function tests at baseline and periodically</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Monitor renal function, serum bicarbonate, and pH</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>proteins</p> <p>Neuralgia pain: Assess location, characteristics, and intensity of pain during therapy.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Client Teaching needs (2)</b></p>	<p>Educate the patient to avoid large doses of vitamin C</p> <p>Educate the patient to avoid organ, high-fructose corn syrup, and large amounts of alcohol</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>A missed dose should be taken as soon as remembered within 2 hr</p> <p>Emphasize the importance of regular follow-ups to monitor serum levels</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Do not crush</p> <p>Can be taken with or without food</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Take with a full glass of water</p> <p>Advise patient to report tinnitus; unusual bleeding of gums; bruising; black, tarry stools; or fever lasting longer than 3 days.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Advise patient to take medication as directed.</p> <p>If a dose is missed, take as soon as remembered unless almost time for next dose.</p> <p>Instruct patient to gently blow nose to clear nostrils prior to administering dose.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>

**Hospital Medications (5 required)**

<b>Brand/Generic</b>	<b>Microzide / Hydrochlorothiazide</b>	<b>Cozaar losartan</b>	<b>acetaminophen TYLENOL</b>	<b>Zofran Ondansetron</b>	<b>Lipitor atorvastatin</b>
<b>Dose</b>	25mg	100 mg	650mg	4 mg	40mg
<b>Frequency</b>	Daily	Daily	Daily	Q6hr PRN	Nightly
<b>Route</b>	PO	PO	PRN Q4hr	PO	PO
<b>Classification</b>	<p>Therapeutic class: Antihypertensive; diuretic</p> <p>Pharmacological: Thiazide</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Therapeutic class: Cardiovascular agent, renal protective agent, antihypertensive</p> <p>Pharmacological: Angiotensin II receptor blocker (ARB)</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Therapeutic: antipyretics, non-opioid analgesics</p> <p>Pharm: Nonsalicylate, paraminophenol derivative</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Therapeutic: antiemetics</p> <p>Pharmacological: five ht3 antagonists</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Therapeutic : lipid-lowering agents</p> <p>Pharmacological: HMG-CoA reductase inhibitors</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<b>Mechanism of Action</b>	HCTZ blocks reabsorption of sodium and chloride in the distal renal	reduces BP by blocking the vasoconstrictive and	Inhibits synthesis of prostaglandins that may serve as	Blocks the effects of serotonin in vagal nerve terminals	Inhibits HMG-CoA reductase  (Jones &

	tubule, increasing excretion of sodium, chloride, potassium, and water  (Jones & Bartlett Learning, 2021).	aldosterone-producing effects of angiotensin II at receptor sites in smooth muscle, adrenal glands, and myocardium  (Jones & Bartlett Learning, 2021).	pain mediators  (Jones & Bartlett Learning, 2021).	(Jones & Bartlett Learning, 2021).	Bartlett Learning, 2021).
<b>Reason Client Taking</b>	Hypertension  (Jones & Bartlett Learning, 2021).	Hypertension  (Jones & Bartlett Learning, 2021).	Analgesia.  (Jones & Bartlett Learning, 2021).	Decrease nausea.  (Jones & Bartlett Learning, 2021).	Lower LDL cholesterol and triglycerides  (Jones & Bartlett Learning, 2021).
<b>Contraindications (2)</b>	patients with known hypersensitivity to HCTZ, other thiazides, or sulfonamides  patients with anuria  Dofetilide  (Jones & Bartlett Learning, 2021).	hyperkalemia, hypotension, severe renal impairment  (Jones & Bartlett Learning, 2021).	Products containing alcohol  hepatic impairment  (Jones & Bartlett Learning, 2021).	Hypersensitivity.  Hepatic impairment  (Jones & Bartlett Learning, 2021).	increased risk of myopathy in older adults;  Hypersensitivity. (Jones & Bartlett Learning, 2021).
<b>Side</b>	Hyperglycemia	urinary tract	Neutropenia	Diarrhea	hyperglyce

<p><b>Effects/Adverse Reactions (2)</b></p>	<p>Hypercalcemia hypophosphatemia hypokalemia</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>infection, diarrhea, anemia, upper respiratory infection,</p> <p>hypotension, hypoglycemia, hyperkalemia,</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Hypokalemia; hypomagnesemia</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Weakness</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>mia</p> <p>chest pain</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Nursing Considerations (2)</b></p>	<p>Monitor for symptom improvement such as decreased edema</p> <p>Administer early in the day</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Monitor CBC, renal function, and serum electrolytes (especially potassium) at baseline and periodically</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>malnourished are at higher risk of developing hepatotoxicity</p> <p>acetylcysteine (Acetadote) is the antidote.</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>Assess for rash; may cause Stevens-Johnson syndrome.</p> <p>Monitor for signs and symptoms of serotonin syndrome</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>	<p>get a diet history;</p> <p>monitor for jaundice</p> <p>(Jones &amp; Bartlett Learning, 2021).</p>
<p><b>Key Nursing Assessment(s)/ Lab(s) Prior to Administration</b></p>	<p>Assess blood pressure and vitals prior to administration</p> <p>Assess labs such as BUN, serum creatinine, uric acid prior to</p>	<p>Monitor BP, heart rate, and weight prior to administration</p> <p>(Jones &amp; Bartlett Learning,</p>	<p>Evaluate hepatic and hematologic function</p> <p>Assess renal function</p> <p>(Jones &amp; Bartlett</p>	<p>Listen to bowel sounds prior to and following administration</p> <p>Assess vitals and</p>	<p>cholesterol and triglyceride levels before treatment;</p> <p>liver function tests</p>

	administration  (Jones & Bartlett Learning, 2021).	2021).	Learning, 2021).	patient for nausea, vomiting.  (Jones & Bartlett Learning, 2021).	(Jones & Bartlett Learning, 2021).
<b>Client Teaching needs (2)</b>	Change positions slowly to reduce dizziness  avoid extended exposure to sunlight  (Jones & Bartlett Learning, 2021).	Tell client to report: dysrhythmia ; dyspnea; confusion weakness; dizziness; paresthesias; altered urinary quantity and/or frequency; peripheral edema or rapid weight gain  (Jones & Bartlett Learning, 2021).	take medication as prescribed  advise patient to avoid other acetaminophen-containing products  (Jones & Bartlett Learning, 2021).	Instruct to take as directed by provider.  Notify provider if symptoms of an irregular heart beat  (Jones & Bartlett Learning, 2021).	Do not double up on missed doses;  Notify provider of right upper abdominal discomfort, dark urine, jaundice. Could indicate liver injury.  (Jones & Bartlett Learning, 2021).

**Medications Reference (1) (APA):**

Jones & Bartlett Learning. (2021). *2021 Nurse’s drug handbook* (20th ed.). Jones & Bartlett Learning.

**Assessment**

**Physical Exam (18 points)**

<p><b>GENERAL (1 point):</b>  <b>Alertness:</b>  <b>Orientation:</b>  <b>Distress:</b>  <b>Overall appearance:</b></p>	<p>Alert  Oriented x4  Not distressed  Clean, well groomed</p>
<p><b>INTEGUMENTARY (2 points):</b>  <b>Skin color:</b>  <b>Character:</b>  <b>Temperature:</b>  <b>Turgor:</b>  <b>Rashes:</b>  <b>Bruises:</b>  <b>Wounds:</b> .  <b>Braden Score: 16</b>  <b>Drains present: Y</b> <input type="checkbox"/> <b>N</b> <input checked="" type="checkbox"/>  <b>Type:</b></p>	<p>White, appropriate for ethnicity. Pale.  Dry  Warm  Normal, less than 3 seconds  None  None  None  BRADEN=16  No drains present</p>
<p><b>HEENT (1 point):</b>  <b>Head/Neck:</b>   <b>Ears:</b>   <b>Eyes:</b>   <b>Nose:</b>   <b>Teeth:</b></p>	<p>Symmetrical, trachea midline, lymph nodes nonpalpable, carotid palpable 2+   Bilateral ears intact, clean, no drainage.   Bilateral: Sclera white, conjunctiva pink, PERLA intact, no lesions   Septum midline, bilateral frontal sinuses are nontender to palpation   Oral mucosa pink, moist, intact, dentition clean</p>
<p><b>CARDIOVASCULAR (2 points):</b>  <b>Heart sounds:</b>  <b>S1, S2, S3, S4, murmur etc.</b>  <b>Cardiac rhythm (if applicable):</b>  <b>Peripheral Pulses:</b>  <b>Capillary refill:</b>  <b>Neck Vein Distention: Y</b> <input type="checkbox"/> <b>N</b> <input checked="" type="checkbox"/></p>	<p>Normal rate and rhythm  Clear S1&amp; S2, no detectable murmurs, gallops, rubs  Radial 2+  Posterior tibialis, dorsalis pedis, femoral, 2+  less than 3 seconds in upper and lower extremities bilaterally</p>

<p><b>Edema</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p> <p><b>Location of Edema:</b></p>	<p>none none n/a</p>
<p><b>RESPIRATORY (2 points):</b>  <b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Breath Sounds: Location, character</b></p> <p><b>ET Tube:</b>  <b>Size of tube:</b>  <b>Placement (cm to lip):</b>  <b>Respiration rate:</b>  <b>FiO2:</b>  <b>Total volume (TV):</b>  <b>PEEP:</b>  <b>VAP prevention measures:</b></p>	<p>No use of accessory muscle  Auscultation of 4 anterior spots: diminished  Auscultation of 8 posterior spots: diminished  No ET Tube  Size of tube: n/a  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</p>
<p><b>GASTROINTESTINAL (2 points):</b>  <b>Diet at home:</b>  <b>Current Diet</b>  <b>Height:</b>  <b>Weight:</b>  <b>Auscultation Bowel sounds:</b>  <b>Last BM:</b>  <b>Palpation: Pain, Mass etc.:</b>  <b>Inspection:</b>  <b>Distention:</b>  <b>Incisions:</b>  <b>Scars:</b>  <b>Drains:</b>  <b>Wounds:</b>  <b>Ostomy:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Nasogastric:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Size:</b> n/a  <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Type:</b> n/a</p>	<p>Regular diet  NPO  149.86cm  126.6kg  Normoactive in all four quadrants  1030 AM  No pain or tenderness, no organomegaly or mass</p> <p>None  None  None  None  None  None  None  No ostomy  No nasogastric  n/a  No PEG Tube  n/a</p>
<p><b>GENITOURINARY (2 Points):</b>  <b>Color:</b>  <b>Character:</b>  <b>Quantity of urine:</b>  <b>Pain with urination:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Dialysis:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Inspection of genitals:</b>  <b>Catheter:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Type:</b>  <b>Size:</b></p>	<p>Yellow  Clear  630cc  No pain  No dialysis  Clean, pink, no drainage or moisture  No catheter  n/a</p>

<b>CAUTI prevention measures:</b>	n/a n/a
<b>MUSCULOSKELETAL (2 points):</b> <b>Neurovascular status:</b> <b>ROM:</b> <b>Supportive devices:</b> <b>Strength:</b> <b>ADL Assistance: Y</b> <input checked="" type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>Fall Risk: Y</b> <input checked="" type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>Fall Score: 75</b> <b>Activity/Mobility Status:</b> <b>Independent (up ad lib)</b> <input type="checkbox"/> <b>Needs assistance with equipment</b> <input type="checkbox"/> <b>Needs support to stand and walk</b> <input type="checkbox"/>	Intact Limited ROM None 5/5 upper and lower extremities bilaterally, Strong, equal  <b>Fall Score=75</b>  Dependent No Needs support to stand and walk
<b>NEUROLOGICAL (2 points):</b> <b>MAEW: Y</b> <input checked="" type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>PERLA: Y</b> <input checked="" type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>Strength Equal: Y</b> <input checked="" type="checkbox"/> <b>N</b> <input type="checkbox"/> <b>if no -</b> <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/> <b>Orientation:</b> <b>Mental Status:</b> <b>Speech:</b> <b>Sensory:</b> <b>LOC:</b>	Alert and oriented to person, place, time, and situation Intact Intact, vocal No sensory deficits, intact None
<b>PSYCHOSOCIAL/CULTURAL (2 points):</b> <b>Coping method(s):</b> <b>Developmental level:</b> <b>Religion &amp; what it means to pt.:</b> <b>Personal/Family Data (Think about home environment, family structure, and available family support):</b>	Family, TV: Food Channel Appropriate Baptist, very significant No pets

**Vital Signs, 2 sets (5 points)**

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0843	93	152/104	20	97.3	99
1050.	96	117/69	20	97.8	98

**Vital Sign Trends/Correlation:**

The client had stable vital signs within normal limits except for her initial blood pressure check. The client’s blood pressure was 152/104; she has a history of hypertension. After her morning medications, hydrochlorothiazide and losartan, her blood pressure dipped down to 117/69 within normal limits.

**Pain Assessment, 2 sets (2 points)**

<b>Time</b>	<b>Scale</b>	<b>Location</b>	<b>Severity</b>	<b>Characteristics</b>	<b>Interventions</b>
<b>0843</b>	<b>Numerical</b>	<b>n/a</b>	<b>0</b>	n/a, client denied pain	<b>N/a</b>
<b>1050.</b>	<b>Numerical</b>	<b>n/a</b>	<b>0</b>	n/a, client denied pain	<b>n/a</b>

**IV Assessment (2 Points)**

<b>IV Assessment</b>	<b>Fluid Type/Rate or Saline Lock</b>
<b>Size of IV:</b> <b>Location of IV:</b> <b>Date on IV:</b> <b>Patency of IV:</b> <b>Signs of erythema, drainage, etc.:</b> <b>IV dressing assessment:</b>	20 gauge Left arm, basilic vein 1/28 Patent, flushes without difficulty Clean, no signs of drainage or redness Dry and intact
<b>Size of IV:</b> <b>Location of IV:</b> <b>Date on IV:</b> <b>Patency of IV:</b> <b>Signs of erythema, drainage, etc.:</b> <b>IV dressing assessment:</b>	22 gauge Left arm, antecubital 1/28 Patent, flushes without difficulty Clean, no signs of drainage or redness Dry and intact
<b>Other Lines (PICC, Port, central line, etc.)</b>	none
<b>Type:</b> <b>Size:</b> <b>Location:</b> <b>Date of insertion:</b> <b>Patency:</b>	n/a n/a n/a n/a n/a

<b>Signs of erythema, drainage, etc.:</b>	n/a
<b>Dressing assessment:</b>	n/a
<b>Date on dressing:</b>	n/a
<b>CUROS caps in place: Y <input type="checkbox"/> N <input type="checkbox"/></b>	n/a
<b>CLABSI prevention measures:</b>	n/a

**Intake and Output (2 points)**

<b>Intake (in mL)</b>	<b>Output (in mL)</b>
1000mL normal saline	630mL urine

**Nursing Care**

**Summary of Care (2 points)**

**Overview of care:** I gave the client her medications, kept her company, and performed a head-to-toe assessment.

**Procedures/testing done:** None under my care.

**Complaints/Issues:** The client did not experience any any complaints or vocalize any discomfort.

**Vital signs (stable/unstable):** The client had stable vital signs within normal limits except for her initial blood pressure check. The client’s blood pressure was 152/104; she has a history of hypertension. After her morning medications, hydrochlorothiazide and losartan, her blood pressure dipped down to 117/69 within normal limits.

**Tolerating diet, activity, etc.:** The client was NPO during my charge due to an upcoming scheduled procedure. The client was very weak due to her recent MI and needed assistance ambulating.

**Physician notifications:** Patient is to remain NPO except medications until procedure. Continue aspirin and heparin.

**Future plans for patient:** The client is to undergo another procedure; discharge planning was not formalized during my care.

### **Discharge Planning (2 points)**

**Discharge location:** The client will return home after he is discharged.

**Home health needs (if applicable):** none

**Equipment needs (if applicable):** none

**Follow up plan:** none at this time

**Education needs:** \*\*KIM\*\*

**Nursing Diagnosis (15 points)**

**\*Must be NANDA approved nursing diagnosis and listed in order of priority\***

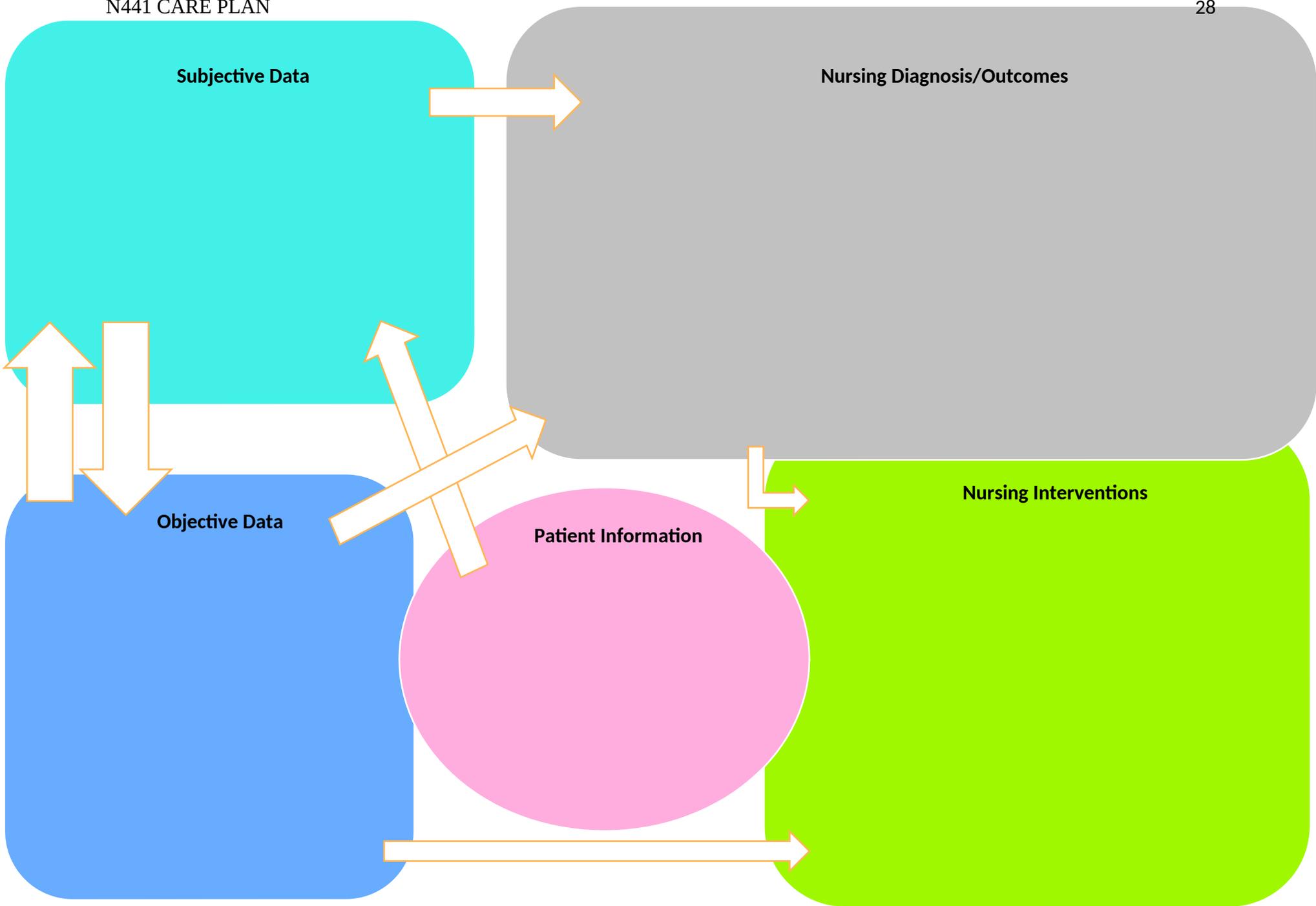
<p><b>Nursing Diagnosis</b></p> <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> </ul>	<p><b>Rational</b></p> <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>	<p><b>Intervention (2 per dx)</b></p>	<p><b>Evaluation</b></p> <ul style="list-style-type: none"> <li>• How did the patient/family respond to the nurse’s actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul>
<p><b>1.</b> Risk for decreased cardiac tissue perfusion related to reduced coronary blood flow as evidence by stenosis in the right coronary artery.</p>	<p>Decreased cardiac perfusion not only poses a risk to the organ itself, but to the entire body; if the heart cannot operate effectively, the rest of the body will receive inadequate perfusion.</p>	<p><b>1.</b>Give medications as prescribed and assess the client continuously for signs of hypoxia.</p> <p><b>2.</b>Monitor vitals continuously, maintain oxygen saturation above 95%.</p>	
<p><b>2.</b> Risk for decreased cardiac output related to MI as evidence by elevated troponins.</p>	<p>The client experienced a severe cardiac event that causes major damage to the organ, impairing its ability to function efficiently.</p>	<p><b>1.</b> Assess the client’s heart sounds and report abnormal sounds such as gallops or murmurs.</p> <p><b>2.</b>Report signs of ineffective output, such as decreased peripheral pulses and cyanotic extremities.</p>	
<p><b>3.</b> Risk for infection related to cardiac procedure as evidence by a newly placed stent.</p>	<p>Patients are at a higher risk of acquiring an infection post-procedure.</p>	<p><b>1.</b> Assess temperature frequently.</p> <p><b>2.</b> Monitor labs for indications of infection such as elevated WBC.</p>	
<p><b>4.</b> Risk for</p>	<p>Rest and</p>	<p><b>1.</b> Maintain the head</p>	

<p>activity intolerance, related to recent MI, as evidence by generalized weakness.</p>	<p>preventing physical exertion reduce oxygen demand and consumption.</p>	<p>of bed elevated to promote comfort  2. Assist the client with ambulation and to the restroom</p>	
<p>5. Risk for thrombus formation related to cardiac procedure as evidence by stent placement.</p>		<p><b>1. Administer antiplatelet medication as prescribed and educate the client about medication adherence for 1 year following procedure.</b>  <b>2. Monitor for signs of thrombus, and subsequent MI, by listening to heart sounds and noting arrhythmias.</b></p>	

**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**

**Nursing Diagnosis/Outcomes**

**Objective Data**

**Patient Information**

**Nursing Interventions**



