N321 Care Plan #2

Lakeview College of Nursing

Michaela Hallett

Demographics (3 points)

Date of Admission 6/11/2020	Patient Initials JJP	Age 80	Gender Male
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Married	Allergies N/A
Code Status Full	Height 5'7	Weight 150 lbs	

Medical History (5 Points)

Past Medical History: HTN, carotid stenosis, hyperlipidemia, transient ischemia attack (TIA), CAD

Past Surgical History: Carotid endarterectomy, joint replacement, cardia catherization (12/24/2019, 1/2/2020, 6/11/2020)

Family History: Paternal- alcohol abuse, tuberculosis Maternal- HTN

Social History (tobacco/alcohol/drugs): Former smoker, 1 pack/day. Never used smokeless tobacco or drugs. Alcohol 5 cans beer/week.

Assistive Devices: N/A

Living Situation: Resides at home with wife.

Education Level: Highschool

Admission Assessment

Chief Complaint (2 points): Chest Pain

History of present Illness (10 points):James Pettigrew is a 80 year old male with known coronary disease status post stenting and repeat stenting of LAD last December. Complains of right anterior chest pain that has lasted 3-4 days prior to coming in today. Pain occurs at rest.

Primary Diagnosis

Primary Diagnosis on Admission (2 points):ACS (Acute Coronary Syndrome)

Secondary Diagnosis (if applicable):Critical 3 Vessel CAD

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

Acute coronary syndrome (ACS) which is a disorder caused by myocardial ischemia. When plaque deposit ruptures a blood clot forms. This clot blocks the flow of blood to heart muscles. When supply of oxygen to cells is too low cells can die. The death of cells results in damage to muscle and is called a myocardial infarction (Mayo Clinic, 2019).

ACS can take either of two forms: unstable angina or myocardial infarction (Capriotti, 2016). There are two main types of MI: ST segment elevation myocardial infarction and non-ST elevation myocardial infarction (Capriotti,2016). The differences between NSTEMI and STEMI are determined by diagnostic testing (Hinkle, 2018).

In unstable angina, these is reduced blood flow to the coronary artery often due to rupture of plaque (Hinkle, 2018). A clot begins to form on top of the lesion, but the artery id not completely occluded (Hinkle, 2018). According to *Brunner & Suddarth*, plaque rupture and subsequent thrombus formation result in the complete occlusion of the artery, leading to ischemia and necrosis of the myocardium supplied by the artery. The area of infarction develops over time and can be minutes to hours. As cells are deprived of oxygen, ischemia develops leading to cellular injury and the lack of oxygen results in infarction or the death of cells (Hinkle, 2018). “The expression time is muscle reflects the urgency of appropriate treatment to improve patient outcomes” (Hinkle, 2018, pp762). Every 43 seconds an American will have a myocardial infarction and many of these people will die as a result (Hinkle, 2018). Early recognition and treatment increase the chances of survival. Clinical manifestations are chest pain that begins

suddenly and continues through rest and medication (Hinkle, 2018). Some patients have prodromal symptoms or a previous diagnosis of CAD, others report no previous symptoms or diagnosis. Patients may present with a combination of symptoms of chest pain, dyspnea, indigestion, nausea and anxiety (Hinkle, 2018). Cool, moist, and pallor skin is a common sign in acute coronary syndrome. Elevated heart rate and respiratory rate which are caused by the sympathetic nervous system, may be shortly present or may persist (Hinkle, 2018). Blood pressure may be elevated because of sympathetic stimulation or decreased contractibility or medications. Some risk factors of acute coronary syndrome include: aging, hypertension, hyperlipidemia, cigarette smoking, unhealthy diet, lack of physical activity, obesity, diabetes, family history of stroke or heart disease, history of hypertension, preeclampsia, or gestation diabetes, and covid-19 infection (Mayo Clinic, 2019).

Diagnosis of ACS is based on symptoms, the 12 leak ECG and laboratory tests. In addition to ST-segment and T-wave changes the electrocardiogram may show tachycardia, bradycardia or other dysrhythmias. An irregular pulse may indicate atrial fibrillation. The prognosis depends on the severity of coronary artery obstruction and the extent of myocardial damage. Physical examination is always conducted but an exam does not confirm the diagnosis (Hinkle, 2018). This gives a good baseline; identity's patients' needs and helps determine the priority of the those needs. Immediate goals of treatment are relieve pain, improve blood flow and restore heart function as quickly as possible. Long term goals for improvement are overall heart function, manage risk factors and lower the risk of a heart attack. A combination of pharmacokinetics and surgical procedures may be used to meet these goals (Mayo Clinic, 2019). Treatment can be angioplasty, stenting or coronary bypass surgery (Capriotti, 2016).

This relates to how my patient presented to the emergency department after three days of feeling chest pain at rest. Troponin levels were elevated, prior diagnosis of CAD and previous stents have been placed. This leads to clinically prove acute coronary syndrome.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J.P. (2016) Pathophysiology: Introductory Concepts and Clinical Perspectives. F.A. Davis Company.

Hinkle, J.L. & Cheever, K.H. (2018). Brunner & Suddarth's Textbook of Medical-Surgical Nursing. (14th ed.). Wolters Kluwer.

Acute coronary syndrome - Diagnosis and treatment - Mayo Clinic. (2020, May 29). Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/acute-coronary-syndrome/diagnosis-treatment/drc-20352140

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	**4.4-5.8**	**4.56**	**4.62**	
Hgb	**13-16.5**	**13.1**	**13.2**	
Hct	**38-50**	**38.8**	**39.5**	
Platelets	**140-440**	**198**	**189**	

WBC	**4-12**	**8.7**	**8.5**	
Neutrophils	**40-60%**	**65.7**	**N/A**	Due to infection or inflammation.
Lymphocytes	**19-49%**	**22.7**	**N/A**	
Monocytes	**3-13%**	**9.5**	**N/A**	
Eosinophils	**0-0.5**	**1.2**	**N/A**	Due to inflammation of heart tissue.
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-	**133-144**	**136**	**137**	
K+	**3.5-5.1**	**4**	**3.8**	
Cl-	**98-107**	**103**	**105**	
CO2	**21-31**	**25**	**24**	
Glucose	**70-100**	**111**	**94**	Due to stress of upcoming procedure
BUN	**7-25**	**23**	**20**	
Creatinine	**0.5-1.2**	**1.35**	**1.11**	Caused by dehydration
Albumin	**3.5-5.7**	**4.1**	**N/A**	
Calcium	**8.6-10.3**	**9.2**	**8.6**	
Mag	**N/A**	**N/A**	**N/A**	
Phosphate	**N/A**	**N/A**	**N/A**	
Bilirubin	**0.2-0.8**	**1.0**	**N/A**	Due to alcohol use, leading to liver damage.

Alk Phos	**34-104**	**120**	**N/A**	Due to alcohol use, leading to liver damage.
AST	**13-39**	**15**	**N/A**	
ALT	**7-52**	**12**	**N/A**	
Amylase	**N/A**	**N/A**	**N/A**	
Lipase	**N/A**	**N/A**	**N/A**	
Lactic Acid	**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	**0.8-1.1**	**1.1**	**N/A**	
PT	**10.1-13.1**	**13.1**	**N/A**	
PTT	**25-36**	**35**	**64**	Due to heparin drip.
D-Dimer	**0.622**	**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	**N/A**	**N/A**	**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	Yellow Clear	Yellow Clear	N/A	
pH	5-9.0	6.0	N/A	
Specific Gravity	1.003-1.030	1.030	N/A	
Glucose	N/A	N/A	N/A	
Protein	N/A	N/A	N/A	
Ketones	N/A	N/A	N/A	
WBC	N/A	N/A	N/A	
RBC	N/A	N/A	N/A	
Leukoesterase	N/A	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	N/A	
Blood Culture	N/A	N/A	N/A	
Sputum Culture	N/A	N/A	N/A	
Stool Culture	N/A	N/A	N/A	

Lab Correlations Reference (APA):

Anderson, D. (2018). *Lab values: Everything you need to know about laboratory medicine and its importance in the diagnosis of diseases*. United States: Medical Creations.

Lab ranges are from OSF HMMC, each institution may have varying lab ranges.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Echocardiogram

Diagnostic Test Correlation (5 points): This test indicated coronary artery disease which relates to the blockage of arteries in the heart resulting in chest pain. Mild concentric left ventricular hypertrophy is present.

Diagnostic Test Reference (APA):

Hinkle, J.L. & Cheever, K.H. (2018). Brunner & Suddarth's Textbook of Medical-Surgical Nursing. (14th ed.). Wolters Kluwer.

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

Home Medications (5 required)

Brand/ Generic	Brilinta/ ticagrelor	Normodyne/ labetalol	Pepcid/ famotidine	Myrbetriq/ mirabegron	IMDUR/ isosorbide mononitrate
Dose	90mg	100mg	20mg	50mg	30mg
Frequency	BID	BID	QD	QD	QD
Route	PO	PO	PO	PO	PO
Classification	Antiplatelet	Antihypertensive	Antiulcer agent	Bladder antispasmodic	Antianginal
Mechanism of Action	Reversibly interacts with the	Blocks alpha1 and beta2 receptors in	Blocks the action of histamine in	Relaxes the detrusor smooth	Nitric oxide activates the enzyme

	platelet P2Y12 ADP-receptor to prevent platelet activation	vascular smooth muscle and beta1 receptors in heart to reduce blood pressure and resistance	the parietal cells, ultimately blocking acid secretion in the stomach	muscle during the storage phase of urinary bladder fill-void cycle	guanylate cyclase, increasing intracellular formation of cGMP
Reason Client Taking	To reduce rate of thrombotic cardiovascular death and stroke due to ACS	Hypertension	Acid	Overactive bladder	To prevent/treat angina
Contraindications (2)	Active bleeding History of intracranial hemorrhage	Asthma Cardiogenic shock	Hypersensitivity to famotidine, other H2-receptor antagonists	Hypersensitivity to mirabegron or its components	Angle-closure glaucoma Head trauma
Side Effects/ Adverse Reactions (2)	Hypotension Atrial fibrillation	Chest pain Edema	Anxiety Dry mouth	Glaucoma Diarrhea	Arrhythmias Palpitations
Nursing Considerations (2)	Do not give to pt with active bleeding Know pt hx of bradycardia related syncope	Can mask symptoms of shock Monitor blood glucose level in diabetic pt	Shake before administering Dilute injection form with normal saline	Do not give to end stage renal disease pts Should not be given to pt with severe uncontrolled hypertension	Use cautiously in pt with hypovolemia or mild hypotension Give 1 hr before 2 hrs after meals

Hospital Medications (5 required)

Brand/Generic	Heparin Leo(CAN) heparin	Lipitor/ atorvastatin	Cozaar/ Losartan	Imdur/ isosorbide mononitrate	Normodyne/labetalol
Dose	15mL/hr	40mg	50mg	60mg	50mg
Frequency	Continuous	Nightly	QD	QD	BID
Route	IV	PO	PO	PO	PO
Classification	Anticoagulant	Antihyperlipidemic	Antihypertensive	Antianginal	Antihypertensive
Mechanism of Action	Enhances antithrombin III's inactivation of the coagulation enzymes thrombin and factors Xa and Xia.	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA and cholesterol synthesis in the liver	Blocks binding of angiotensin II to receptor sites in many tissues	Nitric oxide activates the enzyme guanylate cyclase, increasing intracellular formation of cGMP	Blocks alpha1 and beta2 receptors in vascular smooth muscle and beta1 receptors in heart to reduce blood pressure and resistance
Reason Client Taking	To prevent post-operative thromboembolism	To control lipid levels	To manage hypertension	To prevent/treat angina	Hypertension
Contraindications (2)	DIC(disseminated intravascular coagulation) Severe thrombocytopenia	Active hepatic disease Breastfeeding	Concurrent aliskiren therapy Hypersensitivity to losartan	Angle-closure glaucoma Head trauma	Asthma Cardiogenic shock
Side Effects/Adverse Reactions (2)	Delayed onset of heparin-induced thrombocytopenia Hematemesis	Abdominal pain Decreased libido	Malaise URI	Dizziness Hyperglycemia	Antihypertensive

Nursing Considerations (2)	Use cautiously in alcoholics Patients over age 60	Use cautiously in pt who consume substantial quantities of alcohol Expect to use in pt without obvious CAD but multiple risk factors	In some pts more effective in 2 divided doses daily Know that African descent with HTN may not benefit due to stroke risk	Use cautiously in pt with hypovolemia or mild hypotension Give 1 hr before 2 hrs after meals	Blocks alpha1 and beta2 receptors in vascular smooth muscle and beta1 receptors in heart to reduce blood pressure and resistance

Medications Reference (APA):

Jones & Bartlett Learning. (2019). *2020 Nurse's Drug Handbook* (19th ed.). Burlington, MA: Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alert and oriented to person, place, time. Overall comfortable. No distress present. Well groomed
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 21** **Drains present: Y☒ N ☐** **Type: IV**	Skin is pink, warm and dry. No lesions.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Heady symmetrically round and smooth without bumps or lesions. Hair appears well maintained. Ears normal. Tympanic membrane is pearly grey. Negative for congestions, ear drainage, ear pain hearing loss or tinnitus. Eyes are round reactive

	to light. Sclera white. Conjunctiva pink. Negative for blurred vision, double vision, photophobia, and pain. Nose appears normal. Nasal passage pink and moist. Negative for nose bleeds and drainage. Teeth are symmetrical. Dentures. Mouth/Throat normal. Oropharynx is clear and moist.
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill: <3 sec.** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	No murmur. No S3 or S4 present. Positive for chest pain and palpitations. Negative for PND. Normal heart rate and rhythm. Pulses bilaterally 2+. Strong carotid pulse. Cap refill normal.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Clear normal breath sounds. No wheezing. No respiratory distress.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height: 5'7** **Weight:150 lb.** **Auscultation Bowel sounds:** **Last BM: 6/14/2020** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	Bowel sounds are normal. No distension, incision, scar or drains present. Negative for diarrhea, nausea , abdominal pain, heartburn and vomiting. Current diet and inpatient diet are no restrictions.
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒**	Negative for dysuria, frequency, and urgency. Urine is clear, yellow.

Dialysis: Y ☐ N ☒ **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 6** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	Negative for myalgia and back pain. ROM is normal bilaterally. Independently ambulates to bathroom. No support devices.
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Alert and oriented x3 person, place, and time. Speech is clear and fluent with good repetition, comprehension, and naming. Posture is normal. Gait is steady with normal steps, base, arm swing, and turning. Heel and toe walking are normal. Light touch and sensory intact. Negative for LOC.
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The client has a strong supportive wife, whom he resides with. Coping mechanism is prayer. Generativity developmental level. Methodist believe in something greater than the moon and the stars. Supportive family who live nearby to assist wife if help was needed.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0715	66	105/61	14	97.9	100%
1045	61	105/52	14	97.9	96%

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0717	Numeric 0/10	N/A	N/A	N/A	N/A
1045	Numeric 0/10	N/A	N/A	N/A	N/A

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	20G R cephalic vein 6/11 Infusing Clean, dry, and intact Secured with sterile tape strips No pain, edema

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
135 mL IV 0700	2 occurrences urine
240 mL coffee	1 BM
100% breakfast	

Nursing Care

Summary of Care (2 points)

Overview of care: Ongoing

Procedures/testing done: Heart Cath done 6/11/2020

Complaints/Issues: Chest pain last two nights, relieved by nitro

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc.: Yes, independent

Physician notifications: No acute chest pain changes that require physician notification

Future plans for patient: On 6/17 patient will have CABG

Discharge Planning (2 points)

Discharge location: Home

Home health needs (if applicable):

Equipment needs (if applicable):

Follow up plan: Check-up after D/C to remove staples

Education needs: Spirometer

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

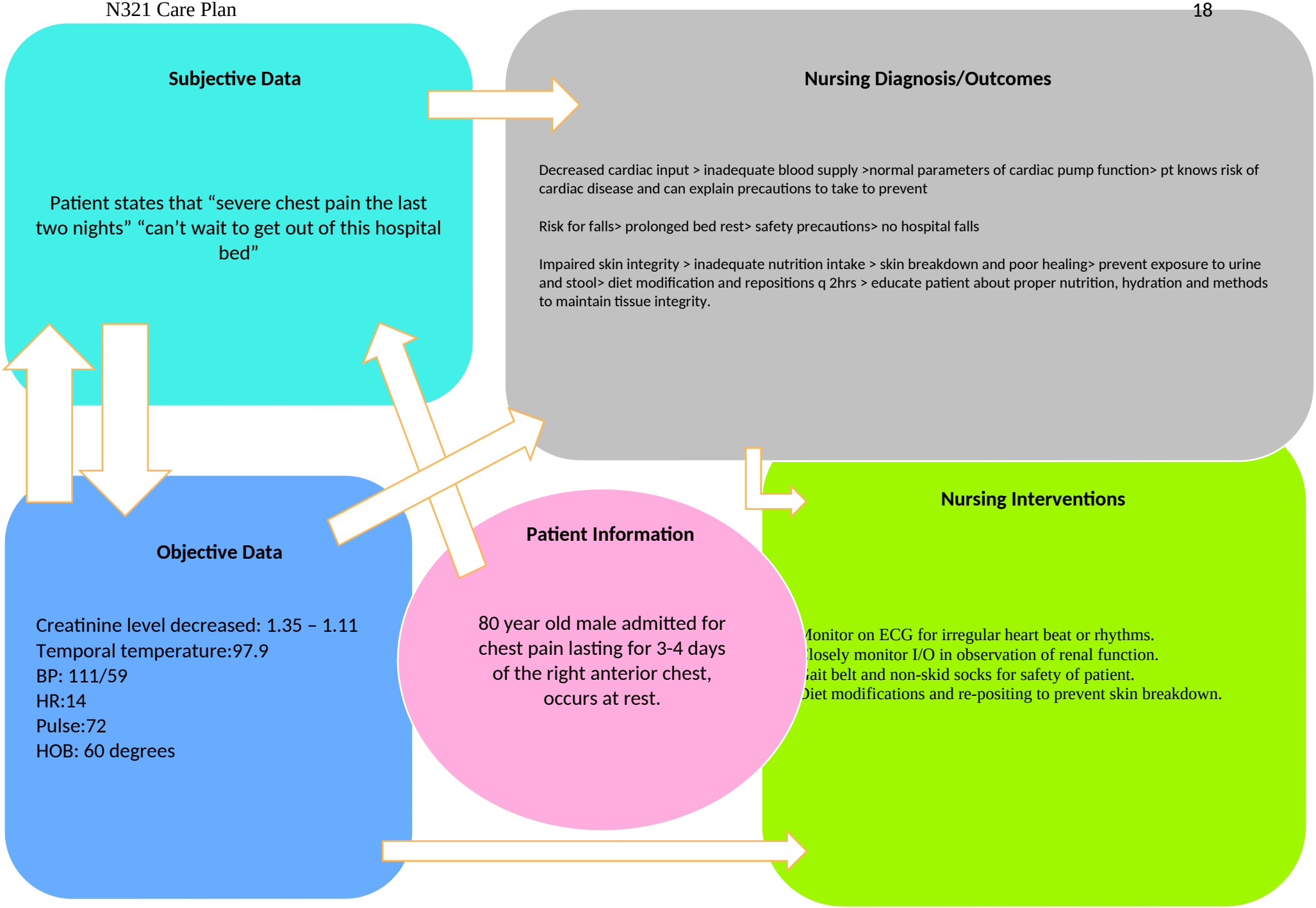
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Decreased cardiac output "related to" multiple stenosis "as evidence by" planned CABG	Chest pain/discomfort is generally suggestive of an inadequate blood supply to the heart, which can compromise cardiac output. Patients result of blocked vessels leads to procedure of open heart.	1.Monitor heart rate, rhythm and blood pressure closely 2.Record intake and output, monitor hourly urine output and note changes.	Goal for the patient to demonstrate an adequate cardiac output as evidenced by blood pressure and pulse rate and rhythm within normal parameters for patient; strong peripheral pulses; and an ability to tolerate activity without symptoms of dyspnea Patient explains actions and precautions to take

			for cardiac disease.
2. Risk for falls “related to” continuous IV infusion “as evidence by” required assistance to ambulate	Male gender and elderly put this patient at higher risk for falls. Due to prolonged bed rest patient’s strength has decreased.	1. Non-skid socks 2.Gait belt	Patient knows not to get out of bed without assistance. Patient will demonstrate prevention measures.
3. Impaired skin integrity “related to” decrease cardiac output “as evidence by” multiple vessel stenosis	Inadequate nutritional intake places the patient at risk for skin breakdown and compromises healing further causing impaired tissue integrity.	1. Reposition patient q2 hours 2Diet modification (high protein and calorie)	Patient describes measures to protect and heal the tissue. Patient demonstrates understanding of plan.

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
Patient states that “severe chest pain the last two nights” “can’t wait to get out of this hospital bed”
Nursing Diagnosis/Outcomes
Decreased cardiac input > inadequate blood supply >normal parameters of cardiac pump function> pt knows risk of cardiac disease and can explain precautions to take to prevent
Risk for falls> prolonged bed rest> safety precautions> no hospital falls
Impaired skin integrity > inadequate nutrition intake > skin breakdown and poor healing> prevent exposure to urine and stool> diet modification and repositions q 2hrs > educate patient about proper nutrition, hydration and methods to maintain tissue integrity.
Objective Data
Creatinine level decreased: 1.35 – 1.11
Temporal temperature:97.9
BP: 111/59
HR:14
Pulse:72
HOB: 60 degrees
Patient Information
80 year old male admitted for chest pain lasting for 3-4 days of the right anterior chest, occurs at rest.
Nursing Interventions
Monitor on ECG for irregular heart beat or rhythms.
Closely monitor I/O in observation of renal function.
Gait belt and non-skid socks for safety of patient.
Diet modifications and re-positing to prevent skin breakdown.