N321 Care Plan # 1

Lakeview College of Nursing

Lindsey Davis

Demographics (3 points)

Date of Admission 9/6/2019	**Patient Initials** MS	**Age** 84	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Retired	**Marital Status** Widowed	**Allergies** Amoxicilin, Macrobid
Code Status Full Code	**Height** 157 cm	**Weight** 89.5kg	

Medical History (5 Points)

Past Medical History: B12 deficiency, Caridiomegaly, Hypertension, Hypotension, IFG, Urinary incontinence, irritable bowel, lumbar stenosis, Screen for colon cancer

Past Surgical History: Bilateral cataracts, abdominal hysterectomy (1984), Laparoscopic cholecystectomy (2008), Hernia repair (1976), hernia repair (2009), Colonoscopy (2007), sling procedure of bladder (2006), total knee replacement R (1993), total knee replacement (2004), spine surgery (2016), right mastectomy (1976), colonscopy polypectomy w/ share (2018)

Family History: Hypertension-father (deceased), macular disease-brother, musculoskeletal disorder-mother (deceased)

Social History (tobacco/alcohol/drugs): Denies alcohol or drug use. And hasn't smoked in 20+ years.

Assistive Devices: walker/cane, bp cuff

Living Situation: Patient lives at home alone.

Education Level: High school

Admission Assessment

Chief Complaint (2 points): Patient present in ED with chest pain for the past 10 days. And shortness of breath starting today 9/6/19. Patient complaining of pain with inspiration.

History of present Illness (10 points): Patient was having mild chest pain for the past nine days, while at home. On day ten patient notices she was have trouble catching her breath and was experiencing a sharp pain with each inspiration of air. Patient then notified family who went and pick her up from home and brought her to Sarah Bush emergency room. Patient was placed on the monitor in the emergency room, a fibrillation and RVT were noted, vital signs were stable, and oxygen saturation were within normal range. CMP and BNP drawn and IV placed in left AC. Patient does have a past medical history of cardiomegaly. Patient was admitted to the cardiac unit for further testing.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): atrial fibrillation with RVR

Secondary Diagnosis (if applicable): Hypotension

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

Atrial fibrillation is most commonly seen in the older population, those 80 years and older. “It is defined as the absence of coordinated, rhythmic atrical contractions. There are multiple, irregular fibrillatory P waves on the ECG that represent multiple, rapid reentrant impulses moving around in the atrial chamber. The multiple irregular P waves may or may not stimulate a concomitant irregular, rapid ventricular response” (Capriotti, T., & Frizzell, J. P., 2016, p. 356). When atrial fibrillation is present in a patient possible presentation could include things like heart palpitations, chest pain, abdominal pain, shortness of breath, light head, fatigue or exercise intolerance. Patients with positive atrial fibrillation vitals signs typically show hypotension, dyspnea on exertion, fatigue, pulse rate deficit a “numeric difference between apical and radial pulse rates” (Hinkle, J. L., Cheever, K. H., & Brunner, L. S., 2018, p. 723).

Test that are used to diagnose the disease include ECG, holter monitor, echocardiogram, stress test, and chest xray. Blood test can also be ordered to help diagnosis such as CBC with differential, TSH, and a Ddimer. If the patient goes untreated, they're at risk for complications such as heart failure or embolic stroke. Treatments for this diagnosis include electrical cardioversion to shock the heart to convert it from an irregular rhythm back to a normal sinus rhythm. If this procedure fails the patient could be started on a bate blocker to slow the heart rate and managed outpatient by a cardiologist.

Patients signs and symptoms of chest pain and shortness of breath are consistent with atrial fibrillation. Current vital signs do not support the diagnosis due to patient already beginning medication treatment for the diagnosis. Patient seems to be tolerating well, chest pain and shortness of breath have concluded. An electrical cardioversion test was preformed today however, test was unsuccessful. Patient was started on a bate blocker after unsuccessful electrical cardioversion, will need to continue to monitoring to verify its effectiveness.

Pathophysiology References (2) (APA):

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

Hinkle, J. L., Cheever, K. H., & Brunner, L. S. (2018). *Brunner & Suddarths textbook of medical-surgical nursing.* Philadelphia: 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	4.2-5.4	4.83	4.77	
Hgb	12-16	15.2	14.8	

Hct	37-47	45.4	44.6	
Platelets	150,000-400,000	171	160	
WBC	5,000-10,000	10.4	5.9	
Neutrophils	2.0-7.0	9.1	4.4	Neutrophils are elevated on admission at 9.1. Neutrophils can be a sign of infection in the body or stress. Due to this patient having both chest pain and respiratory distress, the patient's body would be under stress causing a slightly elevated neutrophil count.
Lymphocytes	1.0-3.0	0.7	1.0	
Monocytes	4-6%	5.8	7.2	
Eosinophils	7% or less		0.5	
Bands				

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	142	144	
K+	3.5-5.0	4.2	3.7	
Cl-	98-107	109	108	Chloride is slightly elevated at day of admission at 109 and came down to 108 two days later. Patient has a past medical history of IFG (impaired fasting glucose).
CO2	22-29	24	30	
Glucose	70-100	157	118	Glucose was elevated on admission at 157 and dropped to 118 two days later. This could be elevated due to the patients past medical history of IFG (impaired fasting glucose).
BUN	6-20	38	20	

Creatinine	0.6-1.3	0.74	0.59	
Albumin	3.5-5.2		3.4	
Calcium	8.6-10	8.6	8.4	
Mag	1.7-2.2	1.8	1.5	Magnesium level on admission was 1.8 very close to out of range. Two days after admission Magnesium had lower out range at 1.5. This could be due to patients diet or due to IFG history.
Phosphate	2.5-4.5	3.7		
Bilirubin	0.1-1.2	0.6		
Alk Phos	20-140	61		
AST	10-30	22		
ALT	10-40	37		
Amylase				
Lipase				
Lactic Acid				

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				
PT				
PTT				
D-Dimer	Less than 0.4	2.04		The D-dimer is elevated at 2.04. This test helps to measure for a

				possibility of a clot formation such as a dvt, pe, dic. With the patient having chest pain, shortness of breath, and possible lack in ambulation due to symptoms this is why the lab value could be elevated.
BNP	450	828		This patients BNP was significantly elevated on admission at 828. This would be expected with patients' complaints of chest pain, shortness of breath and a fibrillation on monitor. BNP levels elevate when the heart cannot pump correctly.
HDL				
LDL				
Cholesterol				
Triglycerides				
Hgb A1c				
TSH	0.4-4.0	2.28		

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				
Glucose				
Protein				
Ketones				
WBC				
RBC				

Leukoesterase				

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				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Henry, N. J. E., McMichael, M., Johnson, J., DiStasi, A., Ball, B. S., Holman, H. C., … Lemon, T. (2016). *Rn adult medical surgical nursing: review module*. Leawood, KS: Assessment Technologies Institute.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

-EC Echo complete with contrast- 9/7/2019 Normal left ventricular chamber size and systolic function with ejection fraction 50-55%. Normal diastolic function.

-EC TEE- 9/7/2019 Limited echocardiogram for the acute evaluation of left atrial appendage due to symptomatic hypotension with new onset atrial fibrillation. Normal left ventricular chamber size with normal-appearing systolic by visual estimation.

Diagnostic Test Correlation (5 points):

The patient had an echo of the heart to look at size, and shape of the heart and the thickness and movement of the heart walls. The patient then had an electrical cardioversion preformed. This procedure allows for a camera do go down into the patient through the esophagus to get a better picture. Then a shock is delivered in efforts to place the heart back into normal sinus rhythm.

Diagnostic Test Reference (APA):

Hinkle, J. L., Cheever, K. H., & Brunner, L. S. (2018). *Brunner & Suddarths textbook of medical-surgical nursing.* Philadelphia: 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	Cyanocobalamin	Sulfamethoxazole	Protonix	raNITIdine	Mirabegron
Dose	1,000 mcg 1mL	800 mg	40mg	150mg	25mg
Frequency	Monthly	BID	Daily	Daily	Daily
Route	Injection	Oral	Oral	Oral	Oral (chew)
Classification	Vitamins	Antimicrobial	Antiulcer	Histamine-2	Antispasmodics
Mechanism of Action	Component and participant in physiologic systems and reactions	Bactericidal	Inhibits gastric parietal cell	Selectively antagonize histamine H2 receptors	Selectively stimulates beta-3 adrenergic receptors, relaxing bladder smooth muscle
Reason Client Taking	B12 deficiency	Help treat infection	Patient has no gallbladder	To prevent heartburn	To prevent urinary retention
Contraindications (2)	Hypersensitive to cobalt. Hereditary optic atrophy	Anemia Thrombocytopenia history	Hypomagnesemia anaphylaxis	Porphyria Caution if hepatic impairment	SBP >180 DBP >110 Caution hepatic impairment
Side Effects/	Anaphylaxis CHF	C. difficile Nausea/vomiting	Interstitial nephritis		Angioedema Hallucinations

Adverse Reactions (2)			pancreatitis		
Nursing Considerations (2)	Monitor vitals to avoid anaphylaxis. Check CK to watch for CHF	CBC BUN/Cr at baseline	Monitor Mg is long term use	Monitor CR Stand slowly caution for dizziness	Monitor BP

Hospital Medications (5 required)

Brand/Generic	FentaNYL	Midazolam	diTIAZem	Magnesium sulfate	Acetaminophen
Dose	25mcg	1 mg	240mg	100 mL	1000 mg
Frequency	One time	One time	daily	One time	Every 6 hrs
Route	IV	IV	Oral	IV	Oral
Classification	Opioids	sedation	Antianginals	Antiarrhythmics	analgesic
Mechanism of Action	Binds to various opioid receptors, producing analgesia and sedation	Binds to benzodiazepine receptors; enhances GABA effects	Inhibits calcium ion influx not vascular smooth muscle and myocardium, relaxing smooth muscle	Participates in physiologic processes	Antipyretic effect via direct action on the hypothalamic heat-regulating center
Reason Client Taking	Given during EC TEE	Given for sedation of EC TEE	To treat high blood pressure	Magnesium level was low on admission and trending down on 9/7 lab draw.	Pain/mild fever
Contraindications (2)	Caution if renal impairment hepatic impairme	CHF, CNS depression	Acute MI w/ pulmonary congestion Afib/flutter	Myocardial damage Heart block	Hepatic impairment or caution if hypovolemia

	nt		w/ accessory bypass tract		
Side Effects/Adverse Reactions (2)	Respirator depressio n apnea	Respiratory depression apnea	Bradycardi a AV Block	Cardiovascula r collapse Respiratory paralysis	Nausea, anaphylaxis
Nursing Considerations (2)	ECG monitor vital signs	Oxygen saturation, vital signs	BP, ECG	Mg and urine output if renal impairment	LFTs, vital signs

Medications Reference (APA):

Jones & Bartlett Learning. (2019). *2019 Nurses drug handbook.* Burlington, MA.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alert and orientated x4 No distress, up to chair watching TV with family. Patient looks comfortable, no interventions needed at this time.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Fair Dry Smooth Warm Loose-Normal tenting present None None On chest from EC TEE 18
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head it round, not sign of lesion or infestation. Lymph nodes present in head and neck. Carotid palpable. Glasses Within normal limits for ears and nose Teeth were all intact.
CARDIOVASCULAR (2 points):	Heart sounds were regularly irregular. Pulses

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:**	palpable. Capillary refill with in normal limits of 3 seconds on both left and right hand.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Clear and equal both anterior and posterior. No signs of distress at this time. Shortness of breath with activity.
GASTROINTESTINAL (2 points): **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:**	No diet restrictions at home, patient is now on a cardiac diet allowing fruits, veggies, whole grains, lean poultry and fish. 157cm 89.5kg Active bowel sounds 9/9/2019 No distention at evaluation No incisions Scars from past surgical history No drains or wounds
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Light yellow urine no abnormal color or smell. 400 mL during last urination
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:**	Patient is a fall risk, uses cane and one assist. Does well, needs little to no assistance.

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☐**	
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	A & O x4 Knows where she is Communicate clearly
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):**	Patient enjoys watching TV, Ellen is her favorite and spending time with family. High school Baptist Patient states she has lots of support when needed, does live at home. Family is close by.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1245	80	109/56	16	37.3 C	94%
1345	76	108/67	20	37.0 C	93%

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1345	0				

1500	0				

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:**	20 gauge Left and right AC 9/6 left and 9/8 Right is saline locked, left not clamped or in use Right AC dry, clean and intact. Left AC is un clamped with no line attached. Dressing was non allusive with dry blood under dressing.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1340 mL	550 mL

Nursing Care

Summary of Care (2 points)

Overview of care:

Procedures/testing done: EC Echo complete with contrast and EC TEE, CMP

Complaints/Issues: Patient resented in the ED with chest pain for the past 10 days and shortness of breath. Patient states issues have cleared up since being admitted on the unit.

Vital signs (stable/unstable): Vitals stable and in normal range

Tolerating diet, activity, etc.: Patient is tolerating diet and activity. Walked the halls with one assist and gait belt 4 times 9/9/19.

Physician notifications: Patient was notified of low magnesium levels, physician ordered magnesium sulfate 100 mL IV one time dose. And CMP lab draw for 9/10/19.

Future plans for patient: Will continue to monitor patient's labs and encourage activity. Patient will start on new medication for a-fibrillation in efforts to manage out patient.

Discharge Planning (2 points)

Discharge location: Plan to discharge 9/10 or 9/11 pending normal labs and patient's response to new medication.

Home health needs (if applicable): no.

Equipment needs (if applicable): no.

Follow up plan: Follow up outpatient with pcp and cardiologist to confirm medication is working appropriately.

Education needs: Educate patient on new medication and a fibrillation.

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

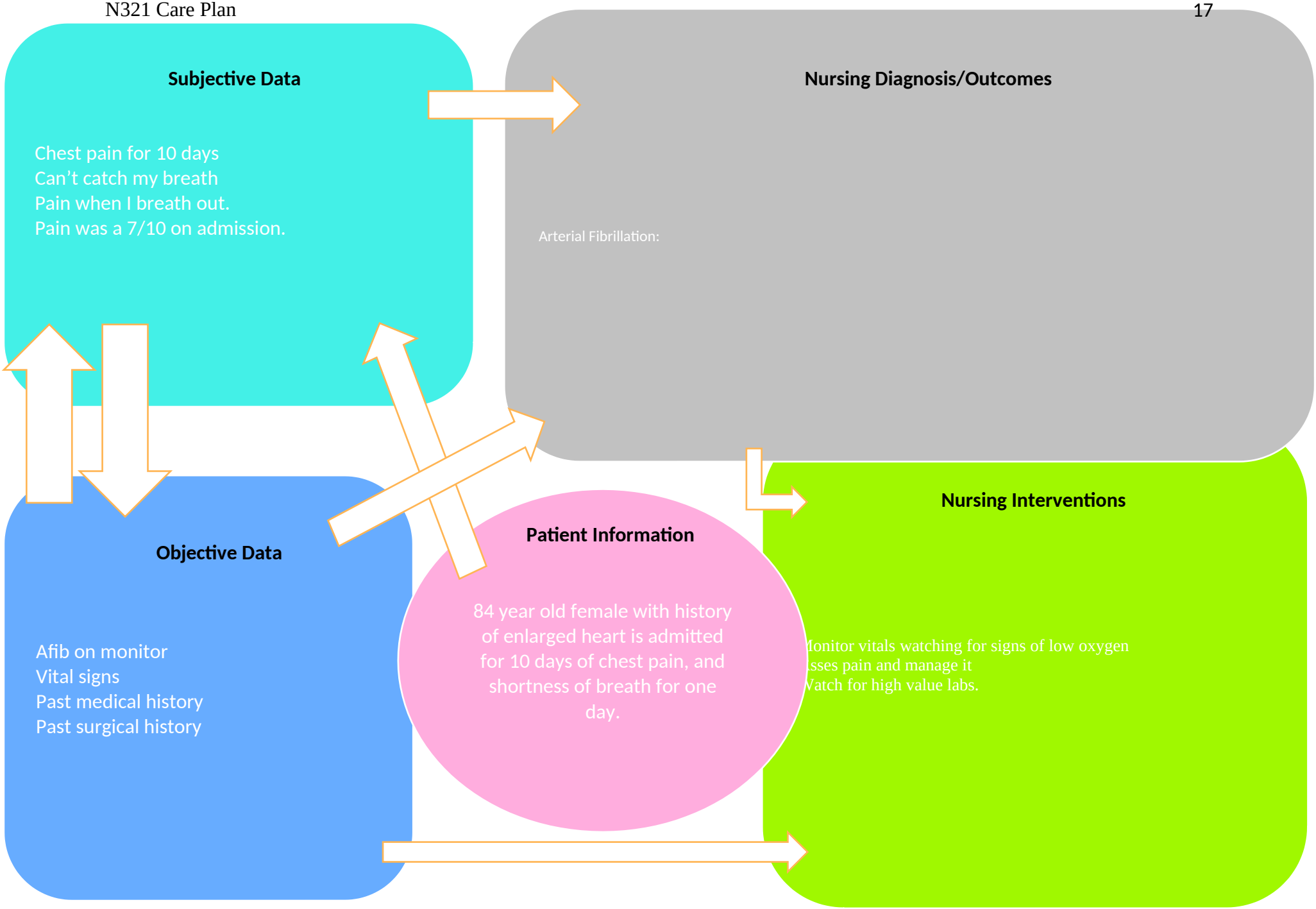
Nursing Diagnosis	**Rational**	**Intervention (2 per dx)**	**Evaluation**
• Include full nursing diagnosis with "related to" and "as evidenced by" components	• Explain why the nursing diagnosis was chosen		• How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes,

			modifications to plan.
1. Decreased cardiac output related to decreased contractility as evidenced low admission vitals.	Patient is at risk due to her hypotension and lack of activity.	1.Monitor for symptoms of heart failure and decrease cardiac output. 2. During acute events ensue limit patients activity level.	Patient met her goal of walking in the hall 3x times by walking in the hall 4x before dinner. Tolerated activity well and under stood her limits.
2. Risk for ineffective cerebral tissue related to afib and hypotension.	Due to the patient having an irregular heart rate she is at risk for perfusion to tissues and organs	**1.** Monitor for chest, neck and jaw pain, shortness of breath, diaphoresis, nausea and vomiting. 2.Apply compression stockings to help with blood flow.	Patient did well in the morning with compression stockings but refused in the afternoon.
3. Risk for deficient fluid volume related to hypotension**.**	Lack activity put this patient at a risk for fluid loss.	1. Monitor patients I & O. 2Watch lab results for dehydration, if low reconnect to fluids.	Patient did well with drinking and urination, was balanced on my shift.

Other References (APA):

Ladwig, G. B., & Ackley, B. J. (2011). *Mosbys Guide to Nursing Diagnosis.* Elsevier Health Sciences.

Concept Map (20 Points):


Subjective Data
Chest pain for 10 days
Can't catch my breath
Pain when I breath out.
Pain was a 7/10 on admission.
Nursing Diagnosis/Outcomes
Arterial Fibrillation:
Objective Data
Afib on monitor
Vital signs
Past medical history
Past surgical history
Patient Information
84 year old female with history of enlarged heart is admitted for 10 days of chest pain, and shortness of breath for one day.
Nursing Interventions
Monitor vitals watching for signs of low oxygen
sses pain and manage it
Watch for high value labs.