N431 Care Plan #2

Whitney Simlin

Lakeview College of Nursing

N431: Adult Health II

Tasha Unrein

10/30/2023

Demographics (3 points)

Date of Admission	Client Initials	Age	Gender
10/28/23	X. B.	73 years old	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White	Unemployed	Married	Chlorohexidine Gluconate (CHG) - rash and pruritis
Code Status	**Height**	**Weight**	
Full	5'5 (167 cm)	233 lbs. (106 kg)	

Medical History (5 Points)

Past Medical History: Congestive Heart Failure, Anemia due to chronic disease, End stage kidney disease, Obesity, Hypertension, Endocarditis, Nephrolithiasis, DVT, Mitral Stenosis, Hyperlipidemia

Past Surgical History: Cholecystectomy (2016), CABG (2018), Fistulotomy (07/2023)

Family History: N/A (no information about family in his chart and the patient is non- English speaking. He speaks Albanian.)

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

Smoking- never; Alcohol- never; Drugs- never

Assistive Devices: None

Living Situation: Lives with son

Education Level: Highschool

Admission Assessment

Chief Complaint (2 points): Fatigue

History of Present Illness – OLD CARTS (10 points): On October 28, 2023, X.B. was admitted to the Carle Foundation Hospital due to complaints of fatigue. The onset of this

symptom occurred while the patient returned home from dialysis. X.B. told his son he felt very

ti. Because X.B,'s concerns, he was brought to the Emergency Department by his son.

Upon initial assessment by the emergency room registered nurse, lethargy and erythema

was noted. The patient's condition was also noted to be severe. The nurse checked his

temperature and he was feverish with a temperature of 103.2 degrees Fahrenheit. It was observed

that nothing seemed to exacerbate the symptoms, but rest was reported as a known relieving

factor. X.B. is currently under medical treatment in the CVICU at Carle Foundation Hospital,

where prescribed medications are being administered to manage the condition.

In an effort to overcome fatigue, the patient rested and elevated extremities while at home

and at the hospital. It is important to note that the patient experienced the symptoms prior to

coming to the E.D. This case shows the significance of prompt medical attention and

intervention when experiencing symptoms of severe infection, and the importance of continued

care and monitoring in a hospital setting.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Severe sepsis

Secondary Diagnosis (if applicable):

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

Severe sepsis is a critical medical condition that occurs when sepsis progresses to a more

advanced and dangerous stage (American Thoracic Society, 2020). Sepsis, is a systemic response

to an infection in the body. In our patient, the infection started near the patient's vascular port for

dialysis. When the systemic response becomes severe, it can lead to widespread inflammation,

organ dysfunction, and a heightened risk of death. Sepsis itself is a life-threatening condition, and severe sepsis represents a more advanced and critical stage of the disease (American Thoracic Society, 2020).

Common signs and symptoms of sepsis are high fever (seen in our patient), rapid heart rate, rapid breathing, low blood pressure (seen in our patient), and altered mental state (Mayo Clinic, 2023). Our patient did not experience all of the symptoms listed but had enough for the physician to suspect the systemic infection. Because of the signs and symptoms and diagnostic testing, X.B. was admitted to the ICU. Severe sepsis is characterized by the same symptoms as sepsis but with the added presence of organ dysfunction or failure. Organs such as the heart, kidneys, liver, and lungs may not function properly, and this can lead to life-threatening complications (Mayo Clinic, 2023).

Diagnosing severe sepsis requires a combination of test and overall clinical judgement of the healthcare provider. A physical examination, clinical assessment, and lab tests (including CBC, inflammatory markers, microbiological tests, blood gas analysis, imaging studies, and urine analysis) are used to diagnose sepsis (American Thoracic Society, 2020). Early recognition, intervention, and immediate medical attention are crucial to improving the chances of survival in cases of severe sepsis. All of the measures mentioned above were used to diagnose X.B.

Sepsis is a medical emergency and requires prompt treatment to prevent further deterioration of organ function and potential death. Patients with severe sepsis typically require intensive medical intervention, including treatment in an intensive care unit (ICU) (seen in our patient), and may need measures such as mechanical ventilation, IV fluid, medications to support blood pressure, anticoagulants, and antibiotics to target the underlying infection. In X.B. blood

pressure medicine, anticoagulants, IV fluid and antibiotics were used to treat the infection. IV

fluid and antibiotics are the two most important treatments for sepsis (American Thoracic

Society, 2020).

Pathophysiology References (2) (APA):

Swearingen, P. L. (2019). *All-in-one nursing care planning resource: Medical-surgical,*

pediatric, maternity, psychiatric nursing care plans (5th ed.)., Elsevier/Mosby.

Mayo Foundation for Medical Education and Research. (2023, February 10). *Sepsis*. Mayo

Clinic. https://www.mayoclinic.org/diseases-conditions/sepsis/symptoms-causes/syc-

20351214

American Thoracic Society. (2020). *Sepsis, severe sepsis, and Septic Shock*.

https://www.thoracic.org/patients/patient-resources/managing-the-icu-experience/sepsis-

severe-sepsis-and-septic-shock.php#:~:text=Severe%20sepsis%20develops%20when

%20the,shock%2C%20die%20in%20the%20hospital.

Laboratory Data (15 points)

CBC <mark>Highlight All Abnormal Labs</mark>—**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	3.80- 5.30	3.93	3.97	
Hgb	12.0- 15.8	11.1	10.7	Reduced red blood cell production due to systemic inflammatory response- sepsis (Learning, 2019).
Hct	36.0- 47.0	34.2	33.8	Reduced red blood cell production due to systemic inflammatory response- sepsis (Learning, 2019).

Platelets	140- 440	170	149	
WBC	4.0- 12.0	<mark>19.23</mark>	10.35	Leukocytosis was due to sepsis infection (Learning, 2019).
Neutrophils	1.60- 7.70	<mark>16.93</mark>	<mark>8.35</mark>	Neutrophilia is due to sepsis infection (Learning, 2019).
Lymphocytes	1.4- 4.4	2.7	<mark>0.86</mark>	Lymphocytosis is due to sepsis infection (Learning, 2019).
Monocytes	1.7- 9.3	7.0	<mark>0.72</mark>	Monocytopenia is caused by sepsis infection (Learning, 2019).
Eosinophils	0.0- 0.7	0.2	0.31	
Bands	0-10%	n/a	n/a	

Chemistry <mark>Highlight All Abnormal Labs</mark>—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	135-145	140	138	
K+	3.5-5.1	<mark>2.8</mark>	3.6	Hypokalemia may be caused by sepsis (Learning, 2019).
Cl-	98-107	103	103	
CO2	22.0-29.0	23.0	22.0	
Glucose	74-100	<mark>131</mark>	97	When fighting an infection, more glucose is released into bloodstream (Learning, 2019).
BUN	10-20	<mark>32</mark>	<mark>72</mark>	End stage renal disease, primarily, but sepsis may have caused the significant elevation (Learning, 2019).
Creatinine	0.55-1.02	<mark>2.65</mark>	<mark>4.18</mark>	End stage renal disease, primarily, but sepsis may have caused the significant elevation (Learning, 2019)
Albumin	3.4-4.8	3.4	<mark>2.8</mark>	Sepsis may have cause liver dysfunction (Learning, 2019).
Calcium	8.9-10.6	9.4	9.1	
Mag	1.6-2.6	1.7	2.1	

Phosphate	2.5-4.5	n/a	n/a	
Bilirubin	0.2-1.2	0.9	n/a	
Alk Phos	44-147	80	n/a	
AST	5-34	<mark>37</mark>	n/a	Sepsis may have cause liver dysfunction (Learning, 2019).
ALT	0-55	17	n/a	
Amylase	40-140	n/a	n/a	
Lipase	10-140	n/a	n/a	
Lactic Acid	4.5-19.8	4.7	n/a	
Troponin	0-0.04	n/a	n/a	
CK-MB	3-5%	n/a	n/a	
Total CK	55-170	n/a	n/a	

Other Tests <mark>Highlight All Abnormal Labs</mark>—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	11.7-13.8	<mark>2.2</mark>	n/a	Sepsis increases coagulopathy (Pagana et al., 2018).
PT	0.9-1.1	<mark>25.1</mark>	n/a	Sepsis increases coagulopathy (Learning, 2019).
PTT	22.4-35.9	<mark>37.6</mark>	n/a	Sepsis increases coagulopathy (Learning, 2019).
D-Dimer	negative	n/a	n/a	
BNP	<127	n/a	n/a	
HDL	>59	n/a	n/a	
LDL	<100	n/a	n/a	

Cholesterol	<200	n/a	n/a	
Triglycerides	<150	n/a	n/a	
Hgb A1c	<5.7	n/a	n/a	
TSH	0.4-4.0	n/a	n/a	

Urinalysis <mark>Highlight All Abnormal Labs</mark>—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	Light yellow and clear	n/a	n/a	
pH	5-9	n/a	n/a	
Specific Gravity	1.000-1.060	n/a	n/a	
Glucose	<20	n/a	n/a	
Protein	<20	n/a	n/a	
Ketones	<3	n/a	n/a	
WBC	5-15	n/a	n/a	
RBC	5-15	n/a	n/a	
Leukoesterase		n/a	n/a	

Arterial Blood Gas <mark>Highlight All Abnormal Labs</mark>—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	N/A	N/A	

PaO2	n/a	N/A	N/A	
PaCO2	n/a	N/A	N/A	
HCO3	n/a	N/A	N/A	
SaO2	n/a	N/A	N/A	

Cultures <mark>Highlight All Abnormal Labs</mark>**—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 (1) (APA):

Learning, J. & B. (2019). *2020 Nurse's Drug Handbook*. Jones & Bartlett Publishers.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest X-Ray 10/29

Diagnostic Test Correlation (5 points): To check catheter placement and show signs of infection.

Diagnostic Test Reference (1) (APA):

Pagana, K.D., Pagana, T.J., & Pagana, T.N. (2018). *Mosby's Diagnostic and Laboratory Test Reference* **(14th ed.). Mosby.**

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

Home Medications (5 required)

Brand/Generic	Bayer/ acetylsalicylic acid	Torsemide/ Damedex	Gabapentin	Toprol-XL/ metoprolol succinate	Cholecalciferol
Dose	81 mg/ tablet	100 mg	(Neurontin)	25 mg	1 capsule 50,000 units
Frequency	Every day	4x/ week	100 mg	Daily	Every 7 days
Route	PO	PO		PO	PO
Classification	NSAID	Loop Diuretic	TID		
Mechanism of Action	Blocks the activity of cyclooxygenase, the enzyme needed for prostaglandin synthesis	Blocks active chloride and sodium reabsorption in the ascending loop pf Henle	Oral		
Reason Client Taking	To reduce the severity of or prevent acute MI	To treat edema in heart failure	Peripheral nerve damage		
Contraindications (2)	Active bleeding; Hypersensitivity to aspirin	Anuric patients, hepatic coma	Pharmacologic: 1-amino-methyl-cyclohexane		

			acetic		
Side Effects/Adverse Reactions (2)	CNS depression and GI bleeding	Hypotension, ECG abnormalities	Therapeutic: Anticonvulsant		
Nursing Considerations (2)	Don't crush time- release or controlled release aspiring tablets unless directed	Inject furosemide slowly over 2 minutes. Monitor patient with hepatic disease	Check the patient's allergy status. Check drug interactions with other drugs		
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess patient's allergy to aspirin; Assess for signs of bleeding	Assess patients blood pressure and heart rate	Assess history of seizures Assess white blood count		
Client Teaching Needs (2)	Do not use aspirin if it has a strong vinegar like odor; Tell the patient to consult prescriber before taking aspirin with any other drug for a blood disorder	Advise patient to change positions slowly to minimize orthostatic hypertension Tell patient to maintain adequate fluid intake	**Avoid aluminum and magnesium antacids within 2 hours**		

Hospital Medications (5 required)

Brand/Generic	**Cefazolin**	**Atorvastatin**	Heparin Sodium Injection/ heparin sodium	**Miralax**	**Midodrine**

Dose	1 mg	20 mg	100	8.6 mg	5 mg
Frequency	Daily	Bedtime	20 mL hour	BID	BID
Route	IV	PO	Subcutaneous	PO	PO
Classification			Anticoagulant		
Mechanism of Action			Binds with antithrombin III, enhancing antithrombin III's inactivation of the coagulation enzymes thrombin (factor IIa) and factors Xa and Xia.		
Reason Client Taking			To prevent arterial or pulmonary embolisms		
Contraindications (2)			Hypersensitivity to heparin; severe thrombocytopenia		
Side Effects/Adverse Reactions (2)			Chills, fever		
Nursing Considerations (2)			Use heparin cautiously in alcoholics; Use cautiously in patients that increase risk hemorrhage		
Key Nursing Assessment(s)/Lab(s) Prior to Administration			PT/INR		
Client Teaching Needs (2)			Advise patient to avoid drugs that interact with heparin, such as aspirin and ibuprofen		

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *Nurse's Drug Handbook*. Composition and Project

Management: S4Carlisle Publishing Services.

Assessment

Physical Exam (18 points) – <mark>**HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS**</mark>

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient appears alert and oriented to person, place, and time.** **Patient is well groomed and seems to be in no acute distress unless ambulating.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 20** **Drains present: Y☐ N ☒** **Type:**	**Skin is pale and pink and warm and dry upon palpation.** **No rashes or lesions.** **Patient has no wounds or bruises.** **Normal skin turgor** **No visible wounds other than IV removals.**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:**	Head/Neck: Symmetrical, trachea is midline without deviation, thyroid is non- palpable, no noted nodules. Bilateral carotid pulses 2+, no

Teeth:	prominent lymphadenopathy. **Ears: No palpable deformities, lumps, or lesions.** **Eyes: Bilateral sclera white with slight redness from dryness/discomfort. Left cornea shows nuclear cataract. Bilateral conjunctiva pink, no visible drainage. Lids are moist and pink without lesions.** **Nose: Septum is midline with no visible drainage production. Sinuses are nontender.** **Throat: Posterior pharynx and tonsils look moist and pink without exudate noted. Uvula is midline, soft palate rises and falls symmetrically. Hard palate intact. Dentition is good, oral mucosa is moist and pink without lesions noted.**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☐** **Edema Y ☐ N ☐** **Location of Edema:**	**. S1 and S2 are clear without murmurs, gallops, or rubs. Normal rate and rhythm. Peripheral pulses are diminished; Lower legs are nonpalpable. Capillary refill is less than 3 seconds. Edema is 2+ mild and located on lower legs and ankles.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	Normal rate and pattern of respirations. **Symmetrical and non-labored, no cough. Posterior lung sounds are diminished in all fields.**

GASTROINTESTINAL:
Diet at home: Regular
Current Diet: Cardiac
Height: 167 cm
Weight:106 kg
Auscultation Bowel sounds:
Last BM:
Palpation: Pain, Mass etc.:
Inspection:
  Distention:
  Incisions:
  Scars:
  Drains:
  Wounds:
	Abdomen is soft, nontender, no organomegaly or masses upon palpation in all four quadrants. **Bowel sounds are hypoactive in all four quadrants.**
	Last bowel movement was today 10/30/23 and was large, hard, and dark brown.
	No visible distention, incisions, scars, drains, or wounds on abdomen are noted.

Ostomy: Y ☐ N ☒
Nasogastric: Y ☐ N ☒
  Size:
Feeding tubes/PEG tube Y ☐ N ☒
  Type:	

GENITOURINARY:
Color:
Character:
Quantity of urine:
Pain with urination: Y ☐ N ☒
Dialysis: Y ☒ N ☐
Inspection of genitals:
Catheter: Y ☐ N ☒
  Type:
  Size:
	Patient produces very limit urine due to end stage kidney disease. There was no urine to evaluate.

MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance:** Y ☐ N ☒ **Fall Risk:** Y ☒ N ☐ **Fall Score: 8** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walkX** ☐	Lower extremities have limited ROM due to generalized weakness and pain. Hand grips demonstrate equal and normal strength. Pedal pushes are weak but equal in strength. Gait is not well balanced and smooth; the patient requires assistance with ambulation. Patient is alert and oriented to person, place, and time. PERRLA intact. Cranial nerves intact.
NEUROLOGICAL: **MAEW:** Y ☒ N ☐ **PERLA:** Y ☒ N ☐ **Strength Equal:** Y ☒ N ☐ **if no -** **Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient is spontaneous to stimuli, obeys commands, and A&Ox4. Strength is normal and equal in the upper extremities but equal and weakened in lower extremities. Mental status, speech, sensory, and LOC are all intact.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Ego Integrity vs. Despair (65+) **Patient is calm and cooperative. He is not religious. His son visits and lifts his spirits when they do come, we've observed.**

Vital Signs, 2 sets (5 points) – <mark>**HIGHLIGHT ALL ABNORMAL VITAL SIGNS**</mark>

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1200	**68**	**122/78**	**18**	**98.4 oral**	**98**
1530	75	124/80	20	98.6 oral	99

Vital Sign Trends: Vital signs are back to normal and staying there.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1500	0-10	N/A	N/A	N/A	No interventions needed; patient had no pain
1600	0-10	N/A	N/A	N/A	No interventions needed; patient had no pain

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18 **Location of IV: Peripheral** **Date on IV: 10/28/23** **Patency of IV: Transparent** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Heparin 100 units/ml 5% dextrose in water 20 mL/hr

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

240	n/a

Nursing Care

Overview of care: Patient is being treated for Sepsis

Procedures/testing done: Chest Xray

Complaints/Issues: Fatigue and weakness

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc.: The patient has a regular diet and is tolerating it well.

Physician notifications: Patient is still fatigued.

Future plans for client: Patient do not have a projected discharge date or time.

Discharge Planning (2 points)

Discharge location: The patient is going home with his son.

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: The patient will follow up with his primary physician and cardiologist.

Education needs: The patient needs to eat healthier, monitor B/P, and establish an exercise

routine.

Follow up plan: Will follow up with PCP

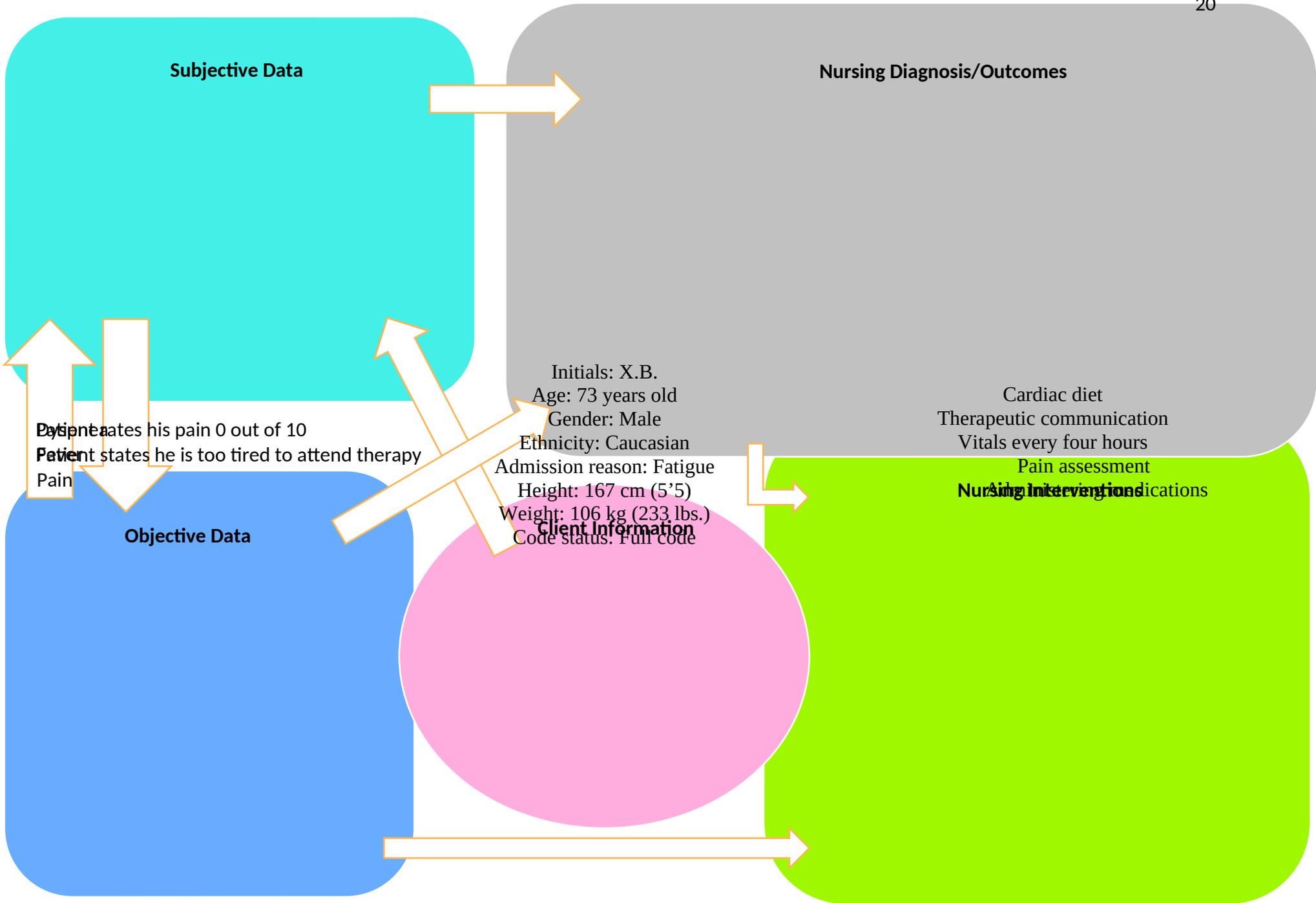**Education needs:** Signs and symptoms of infection

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

Nursing Diagnosis • Include full nursing diagnosis with	Rationale • Explain why the nursing diagnosis	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation • How did the client/family respond to the nurse's actions?

"related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	was chosen			• Client response, status of goals and outcomes, modifications to plan.
1. Risk for infection related to fatigue evidenced by sepsis diagnosis	**It is extremely important for the patient to know when he is showing signs of infection. His son was the reason he came to the ED**	**1.Monitor temperature** **2.Monitor fatigue**	**1. Patient will know when he has an infection**	**The family is supportive and will help patient cooperate**
2.		**1.** **2.**	**1.**	
3.		**1.** **2.**	**1.**	
4. Ineffective coping related to a lack of motivation as evidenced by refusing physical therapy.	**I put this at fourth priority because coping is something we can actively work on to be better.**	**1. Assess for influences that motivate the patient.** **2. Assist the patient to set realistic goals and identify personal skills and strengths.**	**1. The patient's spirits were lifted when his son was visiting, it is possible his presence would motivate the patient to be active in PT.**	**The patient understood and was open to discussing goals and plans that revolve around his own skill set and strengths.**

Other References (APA):

Concept Map (20 Points):

Subjective Data

Days ago Patient rates his pain 0 out of 10
Fever Patient states he is too tired to attend therapy
Pain

Objective Data

Client Information

Initials: X.B.
Age: 73 years old
Gender: Male
Ethnicity: Caucasian
Admission reason: Fatigue
Height: 167 cm (5'5)
Weight: 106 kg (233 lbs.)
Code status: Full code

Nursing Diagnosis/Outcomes

Cardiac diet
Therapeutic communication
Vitals every four hours
Pain assessment
Administer medications

Nursing Interventions