N431 Care Plan #1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
10-21-2020	B.S.	52	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Farmer	Married	Ace Inhibitors - Rash
Code Status	**Height**	**Weight**	
Full	5’6”	152lbs	

Medical History (5 Points)

Past Medical History: A fib, High blood pressure, Hypothyroidism, Type 2 diabetes, Depression, High Cholesterol & Anxiety.

Past Surgical History: Wisdom teeth removed. No date in chart.

Family History: History of heart disease on mother's side. History of type 2 diabetes with mother and aunt on mother's side.

Social History (tobacco/alcohol/drugs): Pt has 1-2 beers a day. Pt denies use of illegal substances. Pt denies use of tobacco products.

Assistive Devices: Pt does not use any assistive devices.

Living Situation: Pt lives at home with his wife and two dogs.

Education Level: Pt graduated from high school.

Admission Assessment

Chief Complaint (2 points): Shortness of Breath

History of present Illness (10 points): The onset of the patient's complaint was two days after the return of a trip to Florida. The date this started was 10-19-2020, and when he arrived in the ER via ambulance on 10-21-2020. The patient explained to the nurse the pain was located in his upper chest and equal pain on both sides. The patient explained that it was constant pain and discomfort. He went on to describe it as "a horrible tightness, and it was really hard to breathe." The patient explained that smoke, laying completely flat, and even moving too fast made it worse. For relief, sitting upright and warm beverages seemed to help. For treatment, he used a home humidifier and an older at home neb treatment.

Primary Diagnosis

Primary Diagnosis on Admission (2 points):. Pneumonia

Secondary Diagnosis (if applicable):.N/a

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

Pneumonia is known as an infection of the lungs that may be caused by bacteria, viruses, or even fungi. (Goldman et al., 2016) The disease causes the lungs' air sacs or alveoli to become inflamed and fill up with pus or fluid. That they can make it hard for the oxygen, you breathe in to get into your bloodstream. (Goldman et al., 2016) Many factors affect how severe or serious a case of pneumonia can be, such as the type of germ producing the lung infection, the patient’s age, and their current overall health status. It is known that the people most at risk are infants and children, adults over the age of 65, and individuals who have other preexisting health problems. (Goldman et al., 2016)

The pneumonia signs and symptoms can vary from mild to severe and include cough, fever, chills, pain, and labored breathing. (Mayo Clinic, 2015) The vitals are expected to be increased above normal ranges. The patient would most likely present with forceful and labored breathing. Some diagnostic tests would be ordered, such as a chest x-ray, an ABG, and a CT of the chest. (Mayo Clinic, 2015)

The physician can order some Blood tests to verify the infection and to try to distinguish the germ that is causing the patient's illness. A sputum test would take a sample of mucus or sputum from a patient right after they deep cough to possibly find the infection source. (Mayo Clinic, 2015)

When the patient receives a pneumonia diagnosis, the physician will work with medical staff to create a personalized treatment plan. (Mayo Clinic, 2015) Treatment for pneumonia is tricky and depends on the type of pneumonia the patient has, how sick they are feeling, their age, and whether they have any other health conditions. (Mayo Clinic, 2015) The main goals of treatment are to cure the infection and prevent the patient from experiencing complications. The health care team will control the patient's fever with aspirin, NSAIDs such as ibuprofen or naproxen, or acetaminophen. (Mayo Clinic, 2015) Encourage the patient to drink lots of fluids to help loosen their secretions and bring up phlegm. (Mayo Clinic, 2015) Educate the patient to stay away from smoke or other irritants and to let your lungs heal. Also, remind them of the importance of rest. (Mayo Clinic, 2015)

Pathophysiology References (2) (APA):

Goldman L, et al., eds. *Overview of pneumonia*. In: Goldman-Cecil Medicine. 25th ed. Philadelphia, Pa.: Saunders Elsevier; 2016. http://www.clinicalkey.com

Mayo Clinic. *Community-acquired pneumonia (adult)*. Rochester, Minn.: Mayo Foundation for Medical Education and Research; 2015.

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	4.31		
Hgb	12-15.8	11.9		
Hct	36-47%	38.1%		
Platelets	140-440	277		
WBC	4-12	14.9		Increased production of white blood cells can be a sign of the pt fighting an infection. (Jones & Bartlett Learning, 2018)
Neutrophils	47-73%	70.8%		
Lymphocytes	18-42%	19.5%		

Monocytes	**4-12%**	**5.4%**		
Eosinophils	**0-5%**	**0.3%**		
Bands	**45-74**	**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-	135-145	136		
K+	3.5-5	4.36		
Cl-	98-107	94		
CO2	21-31	28.0		
Glucose	70-99	175		Pt is diabetic and not eating appropriate foods. (Jones & Bartlett Learning, 2018)
BUN	7-18	17		

Creatinine	**.70-3.0**	**0.87**		
Albumin	**3.4-5.0**	**3.8**		
Calcium	**8.5-10.1**	**9.4**		
Mag	**1.6-2.6**	**2.1**		
Phosphate	**n/a**			
Bilirubin	0.2-0.8 mg/dL	**0.3**		
Alk Phos	34-104 U/L	**78**		
AST	**13-39**	**21**		
ALT	**7-52**	**11**		
Amylase	**n/a**			
Lipase	**11-82**	**31**		
Lactic Acid	**0.5-2.0**	**0.7**		

Troponin	0.000-0.040 ng/mL	**0.020**		
CK-MB	**n/a**			
Total CK	**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**		
PT	**10.1-13.1**	**11.4**		
PTT	**n/a**			
D-Dimer	**n/a**			
BNP	**n/a**			
HDL	**n/a**			
LDL	**n/a**			

Cholesterol	**<200 (mg/dL)**	**167**		
Triglycerides	**below 150 mg/dL.**	**144**		
Hgb A1c	**below 5.7%**	**8.2%**		An A1C level above 8 percent means that your diabetes is not being well-controlled. **(Jones & Bartlett Learning, 2018)**
TSH	**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	**T Yellow or Clear**	**Y Yellow or clear.**		
pH	**5-9**	**6.0**		
Specific Gravity	**1.003-1.030**	**1.012**		
Glucose	**Negative**	**Negative**		

Protein	**Negative**	**Negative**		
Ketones	**Negative**	**Negative**		
WBC	**0-5**	**12-20**		WBC's in the urine suggest there may be an infection **(Jones & Bartlett Learning, 2018)**
RBC	**0-2**	**0-2**		
Leukoesterase	**Negative**	**Negative**		

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		**7.39**	
PaO2	80-100 mmHg		**68 mmHg**	Client is not getting enough oxygen, likely from their COPD. **(Jones**

				& Bartlett Learning, 2018)
PaCO2	35-45 mmHg		**45mmHg**	
HCO3	22.0-26.0		**25.8**	COPD can cause an increased bicarb level **(Jones & Bartlett Learning, 2018)**
SaO2	95-100%		**96%**	**Pt is using a NC on 3L.**

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	**n/a**			
Blood Culture	**No Growth**		**No growth in three days.**	
Sputum Culture	**n/a**			

Stool Culture	**n/a**			

Lab Correlations Reference (APA):

Jones & Bartlett Learning. (2018). ***2018 Manual of Diagnostic and Laboratory Tests (19th ed.)*****. Jones & Bartlett Learning.**

Diagnostic Imaging

All Other Diagnostic Tests (5 points): XRay Chest AP PA on 10-21-2020. CT Chest W/ IV Contrast on 10-22-2020.

Diagnostic Test Correlation (5 points): The CT and Xray scans showed consolidative changes with the right base with bronchograms remains. The scan also showed opacities in both lungs and a small right pleural effusion. This is consistent with the diagnosis of pneumonia. (Nall, 2018)

Diagnostic Test Reference (APA):

Nall, R. (2018, June 21). ***Understanding Pneumonia*****. Healthline.**

Current Medications (10 points, 1 point per completed med)

10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	duloxetine - Cymbalta	levothyroxine - synthroid	Insulin Aspart - Novolog	Ipratropium-albuterol	spironolactone - Aldactone
Dose	30 mg	75 mcg	15 units	3 mL	50 mg
Frequency	4 x daily	every morning before breakfast	4x daily	4 x daily PRN	daily
Route	Oral	Oral	Subcutaneous	Neb	Oral
Classification	Anti-depressant	Thyroid hormone replacement	Insulin	Bronchodilator	diuretic
Mechanism of Action	Inhibits dopamine, serotonin, and norepinephrine to elevate mood	Replaces thyroid hormone by controlling DNA translation and protein synthesis	Stimulates hepatic glycogen synthesis	Stimulates adenyl cyclase	Attaches to receptors on the walls of cells preventing sodium and water reabsorption
Reason Client Taking	Depression	Hypothyroidism	Diabetes	COPD	Reduce the swelling in legs
Contraindications (2)	Hepatic insufficiency; uncontrolled angle-closure glaucoma	Acute MI; adrenal insufficiency	Low blood sugar, hypersensitivity.	Hypersensitivity to atropine; hypersensitivity to any components	Acute renal insufficiency; hyperkalemia
Side Effects/Adverse Reactions (2)	Agitation; anxiety	Anxiety; arrhythmias	weight gain, swelling in hands or feet	Body aches; cough	Diarrhea; muscle weakness
Nursing Considerations (2)	Do not give in patients with severe renal	Monitor blood glucose; Not used for	Monitor glucose levels; educate on how	Use caution in patients with hepatic or renal	May crush and mix with syrup for patients who

	impairment; Avoid stopping medication abruptly	weight loss .	to administer	diseases; use caution in patients with narrow-angle glaucoma	have trouble swallowing; Evaluate blood pressure for effectiveness
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	Monitor serum sodium level; Obtain baseline blood pressure	assess PT	Check BS level	Check all Vitals	Evaluate potassium level; evaluate baseline blood pressure
Client Teaching needs (2)	Do not chew or crush; Avoid excess alcohol consumption	Take at least 30 minutes before breakfast; take with a full glass of water	Inject before meals; store at room temperature or in fridge	Effects should last 5 hours; do not expose this product to the eyes	Take with meals or milk; avoid hazardous activities such as driving if effects are unknown

Hospital Medications (5 required)

Brand/Generic	enoxaparin (lovenox)	levothyroxine (synthroid)	losartan (cozaar)	metoprolol succinate (toprol-xl)	simvastatin (zocor)
Dose	80 mg	50 mcg	100 mg	25 mg	10 mg
Frequency	Every 24 hrs	every morning before breakfast	Daily	Daily	Nightly
Route	Subcutaneous	Oral	Oral	Oral	Oral
Classification	antithrombotic	Thyroid hormone replacement	Antihypertensive	Antihypertensive	Anti-hyperlipidemic
Mechanism of Action	binds with and inactivates clotting factors	Replaces thyroid hormone by controlling	stimulates the adrenal cortex to secrete aldosterone to	stimulates beta receptor sites to decrease cardiac excitability	Interrupts the pathway for cholesterol synthesis

		DNA translation and protein synthesis	reduce blood pressure		causing less to form
Reason Client Taking	Thin blood/ prevent clot	Restore thyroxine levels	hypertension	hypertension	hyperlipidemia
Contraindications (2)	active major bleeding; thrombocytopenia	Acute MI; adrenal insufficiency	concurrent aliskiren therapy; hypersensitivity to losartan	acute heart failure; cardiogenic shock	Active hepatic disease; breastfeeding
Side Effects/Adverse Reactions (2)	bloody stools; dyspnea	Anxiety; arrhythmias	back pain; muscle spasms	back pain; blurred vision	Abdominal pain; heartburn
Nursing Considerations (2)	do not give via IM injection; watch closely for bleeding	Monitor blood glucose; Not used for weight loss	monitor for muscle pain; monitor renal function	use cautiously in patients with angina or hypertension; monitor patients with peripheral vascular disease	Use cautiously in elderly patients; Give 1 hour before or 4 hours after giving bile sequestrant
Key Nursing Assessment(s)/Lab(s) Prior to Administration	serum potassium level	assess PT	baseline blood pressure; serum potassium	Assess ECG	Obtain liver enzymes; monitor lipoprotein level
Client Teaching needs (2)	do not rub the site after giving injection; notify provider about bleeding	Take at least 30 minutes before breakfast; take with a full glass of water	avoid potassium containing salt; avoid exercising in hot weather	take with food at the same time each day; notify the provider if pulse is lower than 60 beats/min	Take drugs in the evening; follow a low fat diet

Medications Reference (APA):

2019 Nurse's drug handbook (Eighteenth edition. ed.). (2019). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alert x3** **Oriented x3** **No apparent distress** **Well groomed**

INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N X** **Type:**	 Tan/yellow Warm Dry < 3 sec None None None 21 No N/A
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 Midline External clear, no drainage Wears glasses Midline, no drainage Has own teeth, clean

CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N X Edema Y X N ☐** **Location of Edema: lower Legs**	Bilateral Clear S1, S2; no murmur, gallop or rub Regular rhythm Able to palpate bilaterally +3 <3 seconds Slight edema in lower legs
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	.No Clear vesicular breath sounds auscultated

GASTROINTESTINAL (2 points): **Diet at home: Normal** **Current Diet - Diabetic Diet** **Height: 5'6"** **Weight: 152lbs** **Auscultation Bowel sounds:** **Last BM: Today** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention: No** **Incisions: No** **Scars: See note** **Drains: No** **Wounds: No** **Ostomy: Y ☐ N X** **Nasogastric: Y ☐ N X** **Size:** **Feeding tubes/PEG tube Y ☐ N X** **Type:**	. Small, healed scar in RUQ. Normoactive in all four quadrants today .

GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: n/a** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Yellow Clear 900 mL
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N ☒** **Fall Score: 2** **Activity/Mobility Status:** **Independent (up ad lib)** **Needs assistance with equipment no** **Needs support to stand and walk**	Independent at home. Stand by to assist in the hospital. No devices. Equal Pt will need to have a healthcare worker present when getting out of bed and moving.

NEUROLOGICAL (2 points): **MAEW: Y ■ N☐** **PERLA: Y ■ N☐** **Strength Equal: Y ■ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation: oriented x3** **Mental Status: cognitive** **Speech: clear** **Sensory: Within normal limits** **LOC: alert**	
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level: Aligned with age.** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Pt lives at home with his wife. She will be caring for him till he improves. The family does not attend a church but do think of themselves as religious. Pt likes to use laughter, talking, and sleeping as coping methods.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0748	78	132/84	19	98.1	93 RA
1120	72	124/78	20	97.2	96 2L NC

Vital Sign Trends: Stable

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0755	**1-10**	**Head**	**3**	**“Slight pain”**	**Turned off lights & offered water. Administer PRN pain med per physician’s orders.**
1032	**1-10**	**Chest**	**1-2**	**“Chest is kind of tight”**	**Assessed lung sounds. Changed pts position in bed.**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18g **Location of IV: Right AC** **Date on IV: Today** **Patency of IV: Patent** **Signs of erythema, drainage, etc.: see note** **IV dressing assessment: see note**	IV dressing was placed today. It draws good and is fully functioning. No signs of erythema, drainage, or irritation. Pt reports no pain with IV. Will continue to monitor the site.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1200ml	**900ml (urine)**

Nursing Care

Summary of Care (2 points)

Overview of care: The pt received daily medications during the student nurses shift. The pts vitals were taken and frequent assessments were completed by both the nurse and the student.

Procedures/testing done:ABG and chest X Ray

Complaints/Issues: Pt has some chest tightness. Pt wants to go home and does not like being in the hospital/.

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: yes all within normal limits

Physician notifications: no physician notification.

Future for patient: Continuation of medical care. Will look at possible discharge tomorrow.

Discharge Planning (2 points)

Discharge location: Pt's home

Home health needs (if applicable): none

Equipment needs (if applicable): none

Follow up plan: Follow up with PCP.

Education needs: Needs more type 2 diabetic teaching. Dietary teaching.

Nursing Diagnosis (15 points)

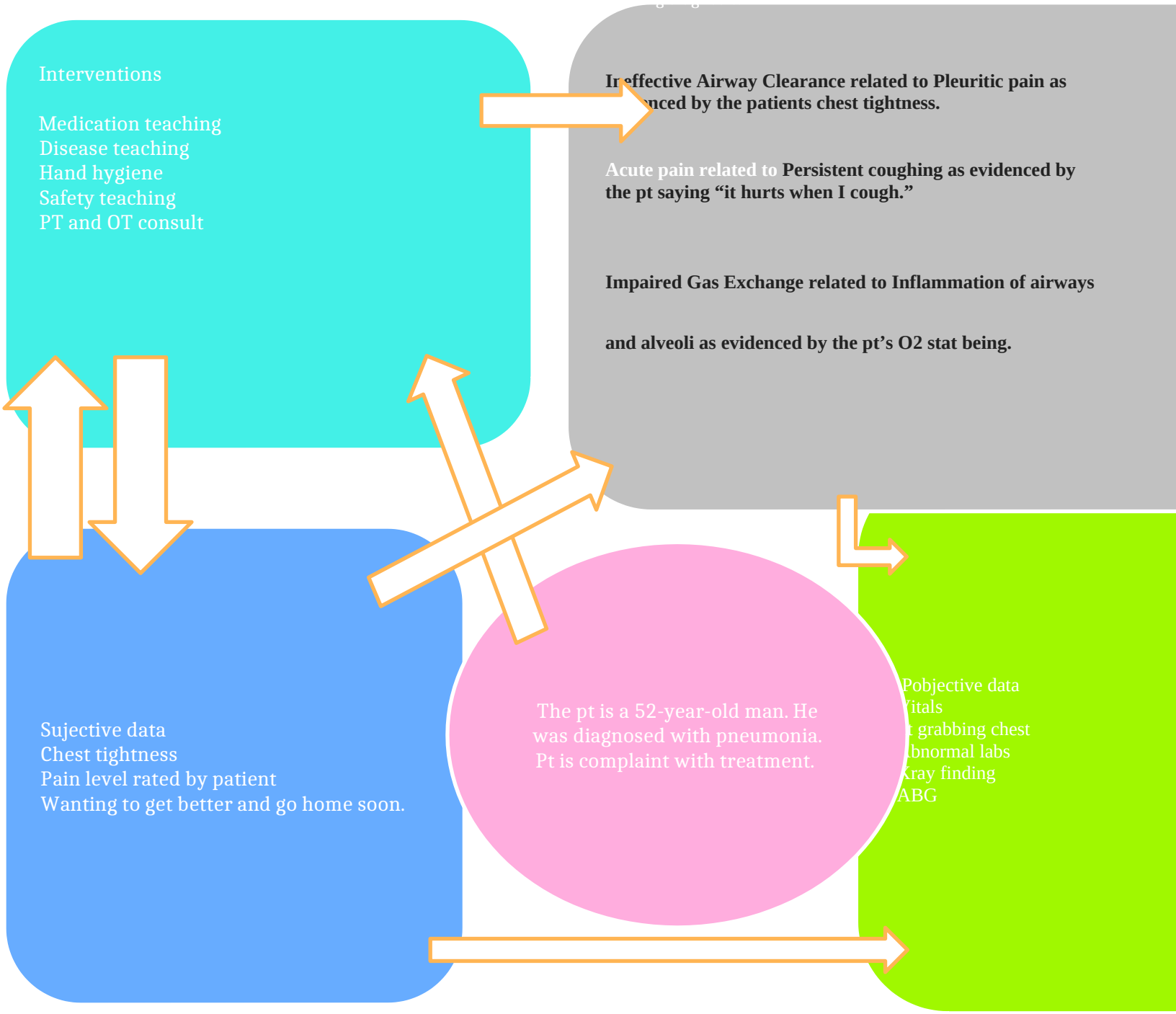
Must be NANDA approved nursing diagnosis and listed in order of priority

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)	EvaluationHow did the patient/family respond to the nurse’s actions? · Client response, status of goals and outcomes, modifications to plan.
Ineffective Airway Clearance related to Pleuritic pain as evidenced by the patients chest tightness.	The patient is coughing secretions frequently and has pain with chest tightness.	1. Assess cough effectiveness and productivity 2. Assess the patient’s hydration status.	Goal met. Pt was instructed how to couch appropriately. This was completed after the nurse assessed couch fxn and productivity. Goal met. Nurse assessed the hydration status and educated the patient on the importance of fluid to help thin secretions.
Impaired Gas Exchange related to Inflammation of airways and alveoli as evidenced by the pt’s O2 stat being.	The pt is having a hard time breathing and had low O2 sats but is now on O2.	1. Monitor ABGs, pulse oximetry. 2. Elevate head and encourage frequent position changes, deep breathing, and effective coughing.	Goal met. Pt is on continuous pulse oximetry. Pt had an ABG done. Goal met. Nurse educated the pt on the importance of these positions.
Acute pain related to Persistent coughing as evidenced by the pt saying “it hurts when I cough.”	The pt has verbalized the pain experienced during coughing.	Patient will verbalize relief/control of pain at level. Pt will verbalize understanding of nonpharmacological interventions for pain	Goal met. Nurses frequently will assess pain level and medication help. Goal met. Pt knows how sitting up and drinking more fluids can help relieve

		relief.	**pain.**
Anxiety related to current health status as evidenced by the patient saying he feels worried in the hospital and with his current condition.	**The patient does not like hospitals and is worried about his health.**	**1. Encourage the patient to discuss concerns.** **2. Provide therapeutic communication to the patient.**	**Goal met. Patient was able to further discuss concerns with the provider and nurse.** **Goal met. The medical staff will always use therapeutic communication with patients.**

Other References (APA):

Concept Map (20 Points):


Interventions
Medication teaching
Disease teaching
Hand hygiene
Safety teaching
PT and OT consult
Ineffective Airway Clearance related to Pleuritic pain as
nced by the patients chest tightness.
Acute pain related to Persistent coughing as evidenced by
the pt saying “it hurts when I cough.”
Impaired Gas Exchange related to Inflammation of airways
and alveoli as evidenced by the pt’s O2 stat being.
Sujective data
Chest tightness
Pain level rated by patient
Wanting to get better and go home soon.
The pt is a 52-year-old man. He
was diagnosed with pneumonia.
Pt is complaint with treatment.
Pobjective data
itals
grabbing chest
bnormal labs
Xray finding
ABG