N321 Care Plan #2

Lakeview College of Nursing

Name Brianna Lilly

Demographics (3 points)

Date of Admission	Client Initials	Age	Gender
4/13/2022	BW	59 yrs	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Not Employed (Retired)	Married	Dulaglutide, Valacyclovir
Code Status	**Height**	**Weight**	
Full code	182.88 cm	127 kg	

Medical History (5 Points)

Past Medical History: Anemia, Anxiety, back pain, bipolar 1, BPH, COPD, Diabetes mellitus type 2, DVT, hyperlipidemia, interstitial lung disease, liver mass, multilevel degenerative disc disease, multiple myeloma, renal disease, sleep apnea, osteoporosis (no date provided in chart for all). Allergic to dulaglutide and valacyclovir. Dulaglutide reaction is nausea and vomiting. Valacyclovir reaction is a rash.

Past Surgical History: Bone marrow transplant (2017), Knee arthroscopy (2020), Non-tunnel dialysis catheter insertion (2016), Port placement (2020), Upper GI endoscopy (2020).

Family History: father-diabetic, brother-diabetic, daughter and mother healthy

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Patient reports never using tobacco, reports smoking marijuana as a teenager, and has been sober from alcohol for 25 years.

Assistive Devices: Patient uses a cane to ambulate and night driving glasses.

Living Situation: Lives at home in Mahomet with 15 yr old daughter and wife, 3 older step children have moved out.

Education Level: Patient completed CDL certification and some college classes at Parkland College.

Admission Assessment

Chief Complaint (2 points): SOB with productive cough.

History of Present Illness – OLD CARTS (10 points): Patient was suffering worsening SOB for 2 weeks. He let his provider know a week ago he was becoming increasingly fatigued and short of breath. Provider instructed patient to come in to the ER. Patient waited until symptoms had worsened over the course of another week. Patient reported difficulty doing his regular household tasks, and was upset he was unable to complete his wife's list of housework for him. Patient has been SOB with a productive cough (whitish sputum), increased fatigue, limitations on physical activities due to SOB and weakness for the past two weeks. Patient reports he saw a plate of food on the counter then came back and it was not there. He feels as though he may have hallucinated the plate of food, which would be new for the patient. His provider's nurse was on the phone with him regarding his oncology treatment when he mentioned being fatigued and SOB. They notified him he should come into the ER ASAP. Patient waited until symptoms were "unbearable" and had his wife drive him from home to Carle ER (3/13/22). CBC, BMP, CTPE, EKG, I-STAT-troponin, COVID-19 screen, Influenza screen, Chest X-Ray, and CTA PE Chest were ordered. CTPE came back with possible pneumonia and antibiotics were ordered. Patient was admitted to Roger 8 for further antibiotic treatment and IV fluids.

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 a disease characterized by edema of the lung with the presence of fluid in the aver air sacs. This is usually caused by an infection but may also emerge from inhalation of chemicals (Capriotti, pp. 483).

Pneumonia usually occurs during the colder months, and is the most prevalent infectious death in the U.S.. Patient tend to develop a cough, fatigue, fever, chest pain. Chills, Exercise intolerance, headache and tachycardia are also seen. Crackle are characteristic on pneumonia. Dull percussion and increased fremitus may be heard. Risk factors include smoking, being immunocompromised, asthma, COPD, alcohol use or illicit drugs, and influenza infection. Exposure to other ill people is important to assess. (Capriotti, pp. 485).

Patient commonly develop pneumonia from inhalation of droplets containing bacteria or a virus. The pathogen attaches to the lung and causes an inflammatory immune response from the body. The inflammation can obstruct the air sacs in the lungs. Excessive mucus produced to flush out the pathogen from the lung can become trapped in the lungs. The patient must cough to remove the excess mucous from obstructing the alveolar sacs. Crackles are caused but the sound created by the alveolar sacs struggling to open against the resistance of the mucus. Patient can struggle to get adequate gas exchange and become hypoxic and even cyanotic (Capriotti, pp. 485).

Pneumonia is diagnosed in a few different methods. The most commonly use diagnostic study is a chest X-ray. A CBC may show if a bacterial or viral infection is present in general. Sputum cultures can be tested for pneumonia and what antibiotic will most

effectively treat it. Thoracocentesis may be ordered depending if a pulmonary effusion is suspected (Capriotti, pp. 485).

Pneumonia is treated with various medication interventions. Antibiotics, bronchodilators, oxygen, are usually routine. Analygesics, antipyretics and IV hydration may also be ordered if necessary for symptoms presented. The best treatment is prevention. It is recommended that older adults are vaccinated against pneumonia (Capriotti, pp. 485).

My patient (59 yr old, white, male) was diagnosed with pneumonia with a chest X-ray, CTA PE chest, and a CTPE. These showed interstitial disease with possible superimposed infiltrates, bilateral pulmonary edema and/or interstitial pneumonia. My patient has a high risk for pneumonia as he smokes and has a history of COPD, as well as being immunocompromised by oral chemotherapy. Even though my patient is a little younger than the typical recommended age for the pneumococcal vaccine I would recommend he receive it in the future as he has high risk factors for developing pneumonia. My patient should continue to be educated on the importance of incentive spirometer, and cough and deep breathing exercises to increase his lung expansion as well as tissue profusion (Capriotti, pp. 485).

Pathophysiology References (2) (APA):

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company. https://fadavisreader.vitalsource.com/books/9781719641470

EPIC chart (2022).

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 (4/13/22)	Today's Value (4/14/22)	Reason for Abnormal Value
RBC	4.10-5.70 10^6 /uL	5.19	N/A	Within defined normal limits
Hgb	12-18 g/dL	15.8	N/A	Within defined normal limits
Hct	37.0-51.0%	48.4	N/A	Within defined normal limits
Platelets	140-400 10^3 /uL	153	N/A	Within defined normal limits
WBC	4.00-11 10^3/ uL	3.70	N/A	Diminished WBC related to oral chemotherapy use (Van Leeuwen & Bladh, 2019)
Neutrophils	1.60-7.70 10^3/uL	1.71	N/A	Within defined normal limits
Lymphocytes	1-4.9 10^3/ uL	0.82	N/A	Diminished Lymphocytes related to oral chemotherapy use (Van Leeuwen & Bladh, 2019)
Monocytes	0-1.10 10^3/ uL	0.89	N/A	Within defined normal limits
Eosinophils	0-0.50 10^3/ uL	0.21	N/A	Within defined normal limits
Bands	0.0-10.0%	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 (4/13/22)	Today's Value (4/14/22)	Reason For Abnormal

Na-	136-145 mmol/L	138	N/A	Within defined normal limits
K+	3.5-5.1 mmol/L	4.6	N/A	Within defined normal limits
Cl-	98-107 mmol/L	106	N/A	Within defined normal limits
CO2	22.0-29.0 mmol/L	21.0	N/A	Diminished CO2 levels related to COPD, and pneumonia as evidenced by poor pulmonary perfusion and SOB (Van Leeuwen & Bladh, 2019)
Glucose	74-100 mg/ dL	236	141	Elevated blood glucose related to stress due to SOB, and diabetes mellitus type 2 (Van Leeuwen & Bladh, 2019)
BUN	8-26 mg/dL	21	N/A	Within defined normal limits
Creatinine	0.55-1.50 mg/dL	1.92	N/A	Elevated creatine levels related to prior diagnoses' disease processes: hypertension, diabetes mellitus type 2 and renal disease (Van Leeuwen & Bladh, 2019)
Albumin	3.5-5.2 g/dL	N/A	N/A	N/A
Calcium	8.9-10.6 mg/dL	8.7	N/A	Diminished calcium levels due to anticonvulsant (diabetic neuropathy) and bisphosphonate (osteoporosis) medication use; in addition, patient has history of renal disease (Van Leeuwen &Bladh, 2019)
Mag	1.6-2.6 mg/ dL	N/A	N/A	N/A
Phosphate	2.4-4.5 Units/L	N/A	N/A	N/A
Bilirubin	0.3-1.0 mg/ dL	N/A	N/A	N/A

Alk Phos	34-104 units/L	N/A	N/A	N/A
AST	5-34 u/L	N/A	N/A	N/A
ALT	0-55 u/L	N/A	N/A	N/A
Amylase	250-4200 u/L	N/A	N/A	N/A
Lipase	114-7352 u/L	N/A	N/A	N/A
Lactic Acid	0.5-2.0 mmol/L	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 (4/13/22)	Today's Value (4/14/22)	Reason for Abnormal
INR	0.9-1.1 secs	1.0	N/A	Within defined normal limits
PT	11.7-13.8 secs	N/A	N/A	N/A
PTT	22.4-35.9 secs	N/A	N/A	N/A
D-Dimer	0-0.50 ng/mL	N/A	N/A	N/A
BNP	100-400 pg/mL	N/A	N/A	N/A
HDL	40-60 mg/dL	N/A	N/A	N/A
LDL	60-130 mg/dL	N/A	N/A	N/A

Cholesterol	150-200 mg/ dL	N/A	N/A	N/A
Triglycerides	30-150 mg/ dL	N/A	N/A	N/A
Hgb A1c	4.7-6.8	N/A	N/A	N/A
TSH	0.4-5.5	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 (4/13/22)**	**Today's Value (4/14/22)**	**Reason for Abnormal**
Color & Clarity	Light yellow, clear	N/A	N/A	N/A
pH	5.0-7.0	N/A	N/A	N/A
Specific Gravity	1.003-1.035	N/A	N/A	N/A
Glucose	Negative	N/A	N/A	N/A
Protein	Negative	N/A	N/A	N/A
Ketones	Negative	N/A	N/A	N/A
WBC	0-25	N/A	N/A	N/A
RBC	0-20	N/A	N/A	N/A
Leukoesterase	Negative	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 (4/13/22)	Today's Value (4/14/22)	Explanation of Findings
Urine Culture	Negative	N/A	N/A	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	N/A	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Van Leeuwen, A. M., & Bladh, M. L. (2019). *Davis's Comprehensive Handbook of Laboratory Diagnostic Tests with Nursing Implication* (8th ed.). F. A. Davis Company.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): CTPE, EKG, I-STAT-Troponin, Covid-19 screen, Influenza screen, Chest X-Ray, CTA PE Chest.

Diagnostic Test Correlation (5 points):

CTPE (4/13/22):

Patient came in with worsening SOB. Scan was done to rule out pulmonary embolism as well as visualize the lungs. Implication; no blood caught, concerns for interstitial lung disease with superimposed infiltrate, concerns for possible PNA. Patient was given a 1 L increase in O2 and antibiotics were ordered for presumed pneumonia.

EKG (4/13/22):

Patient came in with shortness of breath. EKG done to check electrical heart function. Showed normal sinus rhythm.

I-STAT-Troponin (4/13/22):

Patient was SOB. Tropoponin levels taken to rule out heart attack. Troponin was not elevated. Patient did not suffer a heart attack.

Covid-19 and influenza screen (4/13/22):

Rule out covid and influenza as possible cause for the patient's SOB. Both tests were negative. Patient did not have influenza or Covid.

Chest X-Ray (4/13/22):

Patient presented with worsening SOB. Visualizing the heart and lungs is important to identify any issues that can be detected visually. The X-ray showed an enlarged heart, bilateral reticular pulmonary opacities, central line tip was not well visualized, and multi-level degenerative change in lungs. The pulmonary opacities could be due to vascular crowding due to poor inspiratory effort and/or pulmonary edema interstitial pneumonia.

CTA PE Chest (4/13/22):

Patient came in with worsening SOB. SOB is a symptom of a pulmonary embolism. A CTA PE Chest can help visualize if the issue is a pulmonary embolus. The scan showed no grossly evident central or proximal segmental pulmonary embolus, chronic interstitial disease, largely sparing upper lobes, possibly with superimposed infiltrates.

Diagnostic Test Reference (1) (APA):

Van Leeuwen, A. M., & Bladh, M. L. (2019). *Davis's Comprehensive Handbook of Laboratory Diagnostic Tests with Nursing Implication* (8th ed.). F. A. Davis Company.

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed
Home Medications (5 required)

Brand/Generic	**Acyclovir/ Zovirax**	**Tamsulosin/ Flomax**	**Propanolol**	**Lisinopril**	**Gabapentin/ neurotin**
Dose	**400mg**	**0.4mg**	**10mg**	**5mg**	**900mg**
Frequency	**BID**	**Daily**	**Daily**	**Daily**	**TID**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Antiviral**	**Benign prostatic hypertrophy agent**	**Beta-adrenergic blocking agent**	**ACE inhibiter**	**Anticonvulsant**

Mechanism of Action	**Acyclovir breaks down into acyclovir triphosphate which competes for the viral DNA's spot in the DNA chain. This can inactivate or terminate the viral DNA (Jones & Bartlett, 2020)**	**Blocks the muscles from receiving alpha adrenoceptors, relaxing the muscles surrounding the prostate and urethra (Jones & Bartlett, 2020).**	**Blocks the beta adrenoceptors from binding which lowers blood pressure (Jones & Bartlett, 2020).**	**Inhibits ACE enzyme from increasing vasoconstriction which would raise blood pressure (Jones & Bartlett, 2020).**	**Pretends to be GABA in the neuron but inhibits pain signals from being sent, does not bind to gaba receptors blocks certain calcium channel from sending pain response (Jones & Bartlett, 2020).**
Reason Client Taking	**Herpes simplex virus**	**BPH**	**HTN**	**HTN**	**Diabetic neuropathy**
Contraindications (2)	**Hypersensitivity, renal impairment**	**Sulfa allergy, renal failure**	**Asthma, bradycardia**	**Hyperkalemia, renal failure**	**Myasthenia gravis, myoclonus**
Side Effects/ Adverse Reactions (2)	**Nausea, headache**	**Headache, weakness**	**Dizziness, nightmares**	**Headache, dizziness**	**Dizziness, nausea**

Nursing Considerations (2)	**Assess skin to see if drug is effective, assess renal function**	**Assess blood pressure, screen for prostate cancer**	**Monitor for bronchospasm, assess peripheral circulation**	**Assess blood pressure and pulse.**	**Take antacids 2 hours after or before, fall risk due to dizziness**

Hospital Medications (5 required)

Brand/Generic	**Ceftriaxone**	**Divalproen/ depakote**	**Fentanyl/ duragesic**	**Guaifenesin**	**Heparin**
Dose	**1g**	**500mg**	**50mcg/hr**	**200mg**	**5,000u**
Frequency	**120mL/hr daily**	**Daily**	**Every 48 hrs**	**X4hrs PRN**	**Every 8 hrs**
Route	**IV push**	**PO**	**Transderma l**	**PO**	**Subcutane ous**
Classification	**Cephalospor in 3rd gen.**	**Anticonvuls ant**	**Opined analgesics**	**Expectorant**	**Heparin and related products**
Mechanism of Action	**Blocks bacteria from binding on to cell wall (Jones & Bartlett, 2020)**	**Affects the GABA neurotrans mitter increasing it some how while blocking the ion channel (Jones & Bartlett, 2020)**	**Binds to the opioid receptor, reduces GABA neurotrans mission (Jones & Bartlett, 2020)**	**Thins out the mucus, increasing the water volume (Jones & Bartlett, 2020)**	**Increases antithrom bin which acts to slow clotting time (Jones & Bartlett, 2020)**
Reason Client Taking	**Pneumonia**	**Bipolar 1 disorder**	**Pain**	**Pneumonia**	**DVT prevention**
Contraindications (2)	**C. Diff infection, severe liver impairment**	**Suicidal thoughts, hepatic failure**	**Substance abuse, hypotension**	**Severe HTN, hyperthyroi dism**	**Active bleeding, thrombocy topenia**
Side Effects/ Adverse Reactions (2)	**Blood clots, diarrhea**	**Tremors, hair loss**	**Respiratory depression, bradycardia**	**Dizziness, drowsiness**	**Easy bruising, injection site irritation**

Nursing Considerations (2)	**Monitor for hypersensitivity, assess GI function**	**Monitor for internal bleeding, and elevation in ammonia levels**	**Monitor blood pressure and respiratory rate**	**Monitor sputum, encourage fluid intake**	**Monitor clotting time, assess for allergic reaction (SOB, rash, wheezing).**

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2021 nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient appeared to be in no acute distress. Patient was alert and oriented x 4. He was cooperative and pleasant throughout assessment. Appears sufficiently groomed, slightly tired.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** **Braden Score:** **Drains present: Y□ N □** **Type:**	**Patient's skin color was appropriate for ethnicity. Skin was warm, dry, and intact. Patient had a red rash around umbilicus. No lesions or bruising present. Skin turgor <3 secs. No wounds, or drains present. Braden score of 14.**

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head is normocephalic. Head and neck symmetrical. Ears are symmetrical with no visual bleeding or drainage. Patient has no hearing impairment. Patient wears night time glasses for driving only. PERRLA present. Conjunctiva pink, moist. No visual drainage or inflammation in the eyes bilaterally. Nose midline and patent. Patient had bottom front teeth replaced at 13 yrs old.**
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:**	**S1/2 audible without S3 or murmurs auscultated. Normal sinus rhythm. Peripheral pulses +3 bilaterally. Capillary refill <2secs. No neck vain distention. Slight edema in lower legs bilaterally.**
RESPIRATORY: **Accessory muscle use: Y□ N □** **Breath Sounds: Location, character**	Respiratory rate steady and regular. No accessory muscle use. No chest deformities present. Diminished lung sounds in all lobes, and crackles auscultated in lower lobes bilaterally. Breaths were shallow. Patient still SOB and is on 3L of O2 nasal cannula. Patient has a productive cough with whitish sputum.

GASTROINTESTINAL: **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:**	Patient has a regular diet at home. Reports his daughter is vegetarian so they often have healthy meals. Patient is currently on a diabetic diet in the hospital. Patient is 6' tall and 127kg. Bowl sounds audible in all four quadrants. Last BM was yesterday morning. Abdomen was soft and nontender. Slight scarring masses both 2inch left and right of umbilicus related to repetitive insulin administration in the areas. Abdomen was nondistended with no incisions, scars or wounds (dry red rash on abdomen as previously mentioned). No stony, NG tube, feeding tube or PEG tube present.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y □ N □** **Dialysis: Y □ N □** **Inspection of genitals:** **Catheter: Y □ N □** **Type:** **Size:**	**Urine not assessed, patient reported he voided 1 throughout my clinical time without difficulty or pain while the tech was present. No dialysis, no catheter, genital inspection deferred.**

MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **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**	Neuromuscular status intact. Slight tingling in fingers and toes due to diabetic neuropathy. Full ROM of extremities, although back is stiff due to degenerative disc disease. 5/5 strength for extremities bilaterally. No ADL assistance at home, hospital wants one assist for ambulation. Patient uses a cane to ambulate. Fall score 25.
NEUROLOGICAL: **MAEW: Y □ N□** **PERLA: Y □ N□** **Strength Equal: Y □ N □ if no -** **Legs □ Arms □ Both □** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Patient has fatigue due to hypoxia, but extremities are equal and full strength. MAEM and PERLA present. Alert and orientedx4. Speech is clear and logical. Patient can sense touch on all extremities.**
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):**	Coping by talking to family, had family visit just before clinical time was over. Patient appropriate developmental level for age. Patient is Christian. Patient is very family oriented and felt bad about being unable to complete his wife's honey-do list while he was sick.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7:23A	**78 bpm right arm radially**	**138/95 Left arm semi-fowlers**	**22 rpm**	**97.7 F temporally**	**91% 3L O2 nasal cannula**
10:20A	**79 bpm right arm radially**	**130/78 left arm semi-fowlers**	**22 rpm**	**97.7 F temporally**	**89% 3L O2 nasal cannula**

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
7:18A	**0-10**	**Head**	**8/10**	**Constant, throbbing**	**Fentynal patch**
10:20A	**0-10**	**Knee**	**7/10**	**Aching, constant**	**fentynal patch, acetaminophen**

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, right forearm, 4/13/22, patent, intact dressing with no signs of erythema or drainage.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
480 mL milk **200mL ice water**	**1 void**

Nursing Care

Summary of Care (2 points)

Overview of care: antibiotics, and other medications given, assessment done, meal tray ordered and taken out.

Procedures/testing done: none today

Complaints/Issues: none today

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: tolerated diet and activity well

Physician notifications: none

Future plans for client: follow up for incentive spirometer and deep breathing exercises compliance, continue antibiotic therapy.

Discharge Planning (2 points)

Discharge location: Mahomet, home

Home health needs (if applicable): none

Equipment needs (if applicable): incentive spirometer

Follow up plan: Once incentive spirometer obtained educate patient and evaluate compliance/effectiveness.

Education needs: incentive spirometer and deep breathing exercises.

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

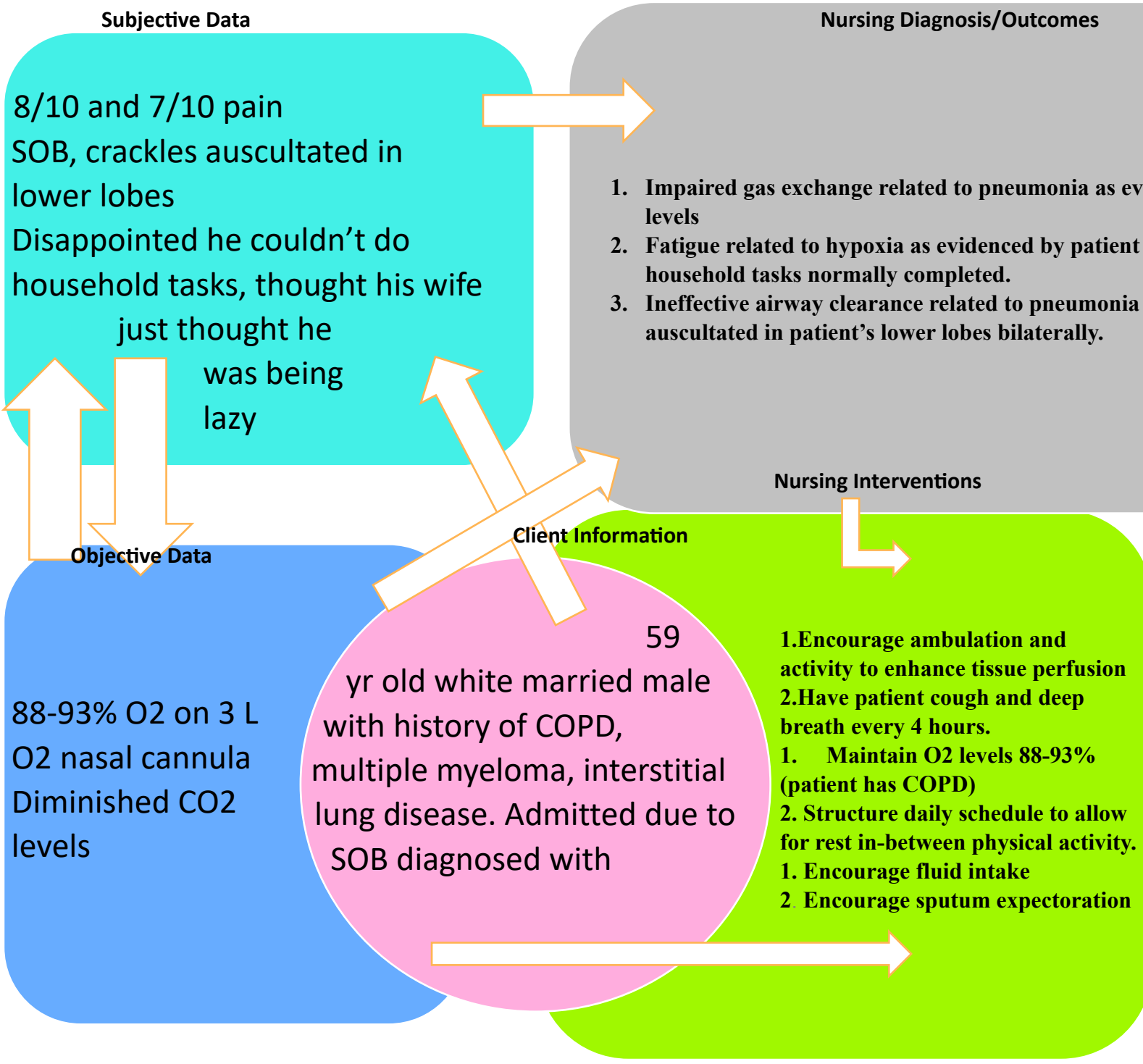
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to pneumonia as evidenced by diminished CO2 levels	**Patient's chief complaint was SOB, this is the primary nursing diagnosis cause**	**1. Encourage ambulation and activity to enhance tissue perfusion** **2. Have patient cough and deep breath every 4 hours**	**1. Patient's respiratory rate does not increase from baseline (20-22 RPM).**	**Patient was cooperative with plan of care. Goal was met due to respiratory rate remaining 22 RPM.**

2. Fatigue related to hypoxia as evidenced by patient reports of being unable to do household tasks normally completed.	**Patient seemed distressed over the fact that his wife was upset and possibly thought he was lazy due to house hold tasks not completed**	**1. Maintain O2 levels 88-93% (patient has COPD)** **2. Structure daily schedule to allow for rest in-between physical activity.**	**1. Patient will utilize methods to help modify fatigue.**	**Patient was pleasant and cooperative with plan of care. Goal met because patient used the previously mention interventions to modify his fatigue.**
3. Ineffective airway clearance related to pneumonia as evidenced by crackles auscultated in patient's lower lobes bilaterally.	**Crackles were auscultated in the lungs which, is not optimal for respiratory function and overall wellbeing.**	**1. Encourage fluid intake** **2. Encourage sputum expectoration**	**1. Oxygen levels will remain or increase from baseline (88-93%)**	**Patient was cooperative and willing with plan of care. Goal met, oxygen levels remained at baseline.**

Other References (APA):

Phelps, L. L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.). Wolters Kluwer.

Concept Map (20 Points):


Subjective Data
8/10 and 7/10 pain
SOB, crackles auscultated in lower lobes
Disappointed he couldn't do household tasks, thought his wife just thought he was being lazy
Nursing Diagnosis/Outcomes
1. Impaired gas exchange related to pneumonia as ev levels
2. Fatigue related to hypoxia as evidenced by patient household tasks normally completed.
3. Ineffective airway clearance related to pneumonia auscultated in patient's lower lobes bilaterally.
Nursing Interventions
Client Information
Objective Data
88-93% O2 on 3 L O2 nasal cannula
Diminished CO2 levels
59 yr old white married male with history of COPD, multiple myeloma, interstitial lung disease. Admitted due to SOB diagnosed with
1.Encourage ambulation and activity to enhance tissue perfusion
2.Have patient cough and deep breath every 4 hours.
1. Maintain O2 levels 88-93% (patient has COPD)
2. Structure daily schedule to allow for rest in-between physical activity.
1. Encourage fluid intake
2. Encourage sputum expectoration