N321 Care Plan # 1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 01/28/2023	**Client Initials** M.L.	**Age** 66 years old	**Gender** Female
Race/Ethnicity African American	**Occupation** On Disability	**Marital Status** Divorced	**Allergies** No Known Allergies
Code Status Full Code	**Height** 6' 1"	**Weight** 251lbs	

Medical History (5 Points)

Past Medical History: Chronic Obstructive Pulmonary Disease (COPD), Chest Pain, Hypertension, Dyslipidemia, Type II Diabetes Miletus, Gastroesophageal Reflux Disease (GERD), Heart Failure, Obesity, Hypothyroidism, Hepatitis-B, Coronary Artery Disease

Past Surgical History: Cardiac Surgery, Thyroidectomy, Tonsillectomy, Right Hand Surgeries, Coronary Artery bypass graft & Right and Left Cataract Removals (2022)

Family History: Aneurysm (both +Mother and +Sister), Cancer (+Sister), Diabetes Miletus (+Father), Myocardial Infarction (+Father, +Brother, and +Eldest Daughter)

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): The client started to smoke at 18 years old and would smoke 47 packs per year based on history. The client admits to having stopped 21 months ago, relapsed, and started smoking again after the client's daughter died two months ago. The client drinks alcohol occasionally. The client denies using or abusing drugs.

Assistive Devices: The client admits using a cane at home occasionally.

Living Situation: The client mentioned living in her own house with her boyfriend and being visited by her children and grandchildren during the weekends.

Education Level: The client stated she finished 12th grade and stopped school because she got pregnant at 15.

Admission Assessment

Chief Complaint (2 points): Shortness of breath for two months

History of Present Illness – OLD CARTS (10 points):

The client presented to the Emergency Department on January 28, 2023, Saturday, complaining of shortness of breath. The client stated that she started to feel shortness of breath two months ago after her eldest daughter died. The client added that her chest felt so tight. She relapsed and started smoking again after 21 months of sobriety. She also mentioned that she started wheezing when she breathed. Also, she said that she lost her voice because of coughing. The client added that she tried drinking hot tea with honey, but the symptoms would not go away. The client also tried taking all her medications for COPD and found no relief. Finally, last Saturday, she stated that she could not take it anymore and decided to go to the Emergency Department for treatment.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Exacerbation of COPD

Secondary Diagnosis (if applicable): N/A

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

Chronic obstructive pulmonary disease (COPD) combines chronic bronchitis, emphysema, and hyperreactive airway disease. It is characterized by the features of these three disorders (Capriotti, 2020, p. 504).

Smoking is the primary cause of COPD, as 90% of patients with this condition are smokers, but occupational and environmental exposures to chemicals, dust, and secondhand smoke are also causes (Capriotti, 2020, p. 504).

COPD is characterized by poorly reversible airflow limitation caused by chronic bronchitis, emphysema, and hyperreactive airway disease. The characteristic features of chronic bronchitis are hypersecretion of mucus in the large and small airways, hypoxia, and cyanosis. Excessive mucus creates an obstruction to inspiratory airflow that inhibits optimal oxygenation. To be diagnosed with chronic bronchitis, the individual has to have had a cough for three months out of the year for two consecutive years (Capriotti, 2020, p. 504).

In emphysema, the characteristic finding is overdistention of alveoli with trapped air, which obstructs expiratory airflow, loss of elastic recoil of the alveoli, and high residual volume of carbon dioxide in the lung. The airways are also hyperreactive to irritants, and episodes of bronchoconstriction are common in COPD (Capriotti, 2020, p. 505).

Signs and symptoms of COPD include chronic bronchitis, emphysema, and asthma. Dyspnea is usually the first symptom, initially occurring with heavy exertion. As the disease progresses, dyspnea worsens with less and less vigorous exertion. Cough or wheezing may be a chief complaint. The cough may be productive, and sputum should be expectorated for culture. Productive cough, hypoxia, and cyanosis are classic signs of chronic bronchitis (Capriotti, 2020, p. 506).

COPD can cause many complications, which include respiratory infections, heart problems, lung cancer, high blood pressure in lung arteries, and depression (*COPD - Symptoms and Causes*, 2020).

Treatment of COPD involves a stepwise approach that begins with short-acting bronchodilator agents for the patient with mild disease and incorporates long-acting agents as the disease progresses in severity (Capriotti, 2020, p. 507). Nonpharmacological interventions

include smoking cessation, pneumococcal and influenza vaccines, pulmonary rehabilitation, and oxygen therapy (Capriotti, 2020, p. 507).

To prevent COPD, the client must quit smoking to help reduce the risk of heart disease and lung cancer (*COPD - Symptoms and Causes*, 2020).

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives* (2nd ed.). F. A. Davis Company.

COPD - Symptoms and causes. (2020, April 15). Mayo Clinic. Retrieved January 30, 2023, from https://www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679.

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 (1/28)	Today's Value (1/30)	Reason for Abnormal Value
RBC	3.8 – 5.3 10^6 cells/µL	**4.47 10^6 cells/µL**	**4.01 10^6 cells/µL**	**The client's lab result is within normal range.**
Hgb	12.0 - 16.0 g/dL	**13.3 g/dL**	**11.8 g/dL**	**COPD causes the Hbg to decrease due to the lack of oxygen in the blood (Pagana et al., 2021, p. 265).**
Hct	37.0% - 47.0%	**40.4%**	**36.4%**	**COPD causes the Hct to decrease due to the lack of oxygen in the blood (Pagana et al., 2021, p. 265).**
Platelets	140 – 440 x 10^9/L	**285 x 10^9/L**	**287 x 10^9/L**	**The client's lab result is within normal range.**
WBC	4.00 - 12.00 x 10^3/ µL	**10.8 x 10^3/ µL**	**14.2 x 10^3/ µL**	**COPD causes the WBC count to decrease related to poorer lung function (Pagana et al., 2021, p. 668).**
Neutrophils	47% - 73%	**60.5%**	**67.6%**	**The client's lab result is within normal range.**
Lymphocytes	19% - 49%	**30.2%**	**21.8%**	**The client's lab result is within normal range.**
Monocytes	3% - 13%	**7.5%**	**10.1%**	**The client's lab result is within normal range.**
Eosinophils	0% - 8%	**1.2%**	**0.0%**	**The client's lab result is within normal range.**
Bands	0% - 3%	**N/A**	**N/A**	**The provider did not order the test for the client.**

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

Lab	Normal Range	Admission Value (1/28)	Today's Value (1/30)	Reason For Abnormal
Na-	135 – 145 mmol/L	**141 mmol/L**	**141 mmol/L**	**The client's lab result is within normal range.**
K+	3.5 - 5.1 mmol/L	**3.4 mmol/L**	**3.6 mmol/L**	**The client's lab result is within normal range.**

Cl-	98 – 108 mmol/L	**106 mmol/L**	**104 mmol/L**	**The client's lab result is within normal range.**
CO_2	22 – 31 mmol/L	**24 mmol/L**	**28 mmol/L**	**The client's lab result is within normal range.**
Glucose	70 – 99 mg/dL	**130 mg/dL**	**252 mg/dL**	**Inappropriate elevations in glucagon levels in hyperglycemic Type I diabetic patients indicate that paradoxical glucagon release may contribute to disease severity (Pagana et al., 2021, p. 240).**
BUN	7 – 25 mg/dL	**11 mg/dL**	**15 mg/dL**	**The client is within normal range.**
Creatinine	0.5 - 1.0 mg/dL	**1.1 mg/dL**	**0.88 mg/dL**	**The increase in Creatinine level is due to the reduced renal blood flow due to CHF, atherosclerosis, and diabetic neuropathy (Pagana et al., 2021, p. 185)**
Albumin	3.5 - 5.7 g/dL	**3.4 g/dL**	**3.5 g/dL**	**The lack of amino acids available for building proteins contributes to this observation. The liver dysfunction associated with malnutrition probably contributes to low albumin levels (Pagana et al., 2021, p. 409).**
Calcium	8.8 - 10.2 mg/dL	**8.8 mg/dL**	**8.7 mg/dL**	**The client underwent thyroidectomy, which caused the calcium production to decrease (Pagana et al., 2021, p.135).**
Magnesium	1.3 - 2.1 mg/dL	**1.6 mg/dL**	**N/A**	**The client's lab result is within normal range.**
Phosphate	2.8 - 4.5 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Bilirubin	0.2 – 0.8 mg/dL	**0.4 mg/dL**	**0.2 mg/dL**	**The client's lab result is within normal range.**
Alk Phos	34 – 159 U/L	**98 U/L**	**89 U/L**	**The client's lab result is within normal range.**
AST	9 – 36 U/L	**14 U/L**	**14 U/L**	**The client's lab result is within normal range.**
ALT	7 – 52 U/L	**17 U/L**	**17 U/L**	**The client's lab result is within normal range.**
Amylase	29 – 103 U/L	**N/A**	**N/A**	**The provider did not order the test for the client.**

Lipase	11 – 82 U/L	**N/A**	**N/A**	**The provider did not order the test for the client.**
Lactic Acid	0.5 - 2.0 mmol/L	**2.3 mmol/L**	**1.4 mmol/L**	**COPD causes the CO to bind to hemoglobin rather than O_2. Therefore, no O_2 is available to the tissues for normal aerobic metabolism, which causes anaerobic metabolism and forms increased lactic acid levels (Pagana et al., 2021, p. 307)**

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 (1/21)	Today's Value (1/22)	Reason for Abnormal
INR	0.8 - 1.1 Seconds	**1.0 Seconds**	**N/A**	**The client's lab result is within normal range.**
PT	11.0 - 13.5 Seconds	**10.7 Seconds**	**N/A**	**COPD causes the thrombin to increase, thus, lowering PT time (Pagana et al., 2021, p. 414).**
PTT	30 – 40 Seconds	**31 Seconds**	**N/A**	**The client's lab result is within normal range.**
D-Dimer	< 300 ng/mL	**N/A**	**N/A**	**The provider did not order the test for the client.**
BNP	0 – 100 pg/dL	**176**	**N/A**	**Increased BNP levels are caused by CHF, MI, and HTN (Pagana et al., 2021, p. 349).**
HDL	> 60 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
LDL	< 100 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Cholesterol	< 200 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Triglycerides	< 150 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Hgb A1c	4.0% - 6.0%	**10.2%**	**N/A**	**The increased level of HA1c is caused by the poorly controlled diabetes of the client (Pagana et al., 2021, p. 253).**
TSH	0.4 - 4.2 µIU/mL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Troponin	0.0 – 0.4	**<0.3**	**<0.3**	**The client's lab result is within**

	mg/mL			**normal range.**
CK-MB	30-223 U/L	**N/A**	**N/A**	**The provider did not order the test for the client.**
CK-Total	3% - 5%	**N/A**	**N/A**	**The provider did not order the test for the client.**
ABG pH	7.35 – 7.45	**7.44**	**N/A**	**The client's lab result is within normal range.**
ABG PCO_2	35 – 45 mm/Hg	**N/A**	**N/A**	**The provider did not order the test for the client.**
ABG HCO_3	22 – 26 mEq/L	**N/A**	**N/A**	**The provider did not order the test for the client.**

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	Clear - Yellow	**N/A**	**N/A**	**The provider did not order the test for the client.**
pH	5.0 - 9.0	**N/A**	**N/A**	**The provider did not order the test for the client.**
Specific Gravity	1.001 - 1.029	**N/A**	**N/A**	**The provider did not order the test for the client.**
Glucose	Negative	**N/A**	**N/A**	**The provider did not order the test for the client.**
Protein	< 20 mg/dL	**N/A**	**N/A**	**The provider did not order the test for the client.**
Ketones	Negative	**N/A**	**N/A**	**The provider did not order the test for the client.**
WBC	< 5 hpf	**N/A**	**N/A**	**The provider did not order the test for the client.**
RBC	< 5 hpf	**N/A**	**N/A**	**The provider did not order the test for the client.**
Leukoesterase	Negative	**N/A**	**N/A**	**The provider did not order the test for the client.**

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 (1/28)	Today's Value (1/30)	Explanation of Findings
Urine Culture	Negative	**N/A**	**N/A**	**N/A**
Blood Culture	Negative	**No Growth**	**No Growth**	**The client's lab result is within normal range.**
Sputum Culture	Negative	**N/A**	**N/A**	**N/A**
Stool Culture	Negative	**N/A**	**N/A**	**N/A**

Lab Correlations Reference (1) (APA):

Pagana, T. J., Pagana, T. N., & Pagana, K. D. (2021). *Mosby's® Manual of Diagnostic and Laboratory Tests* (7th ed.). Elsevier - Health Sciences Division.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

1/28/2023: CT Chest with Contrast

Indication: Pneumonia complication suspected PE

Impression: No acute findings in the visualized arteries of the chest.

1/28/2023: CXR (Chest Xray)

Findings: Lungs Grossly Clear

Impression: No Acute Disease

Diagnostic Test Correlation (5 points):

Chest X-Ray (CXR) was conducted for the client to evaluate pulmonary and cardiac systems (Pagana et al., 2021, p. 982). Through the provider(s)' pneumonia complication and suspected pulmonary embolism (PE) indication, the client's CXR result indicated no acute

findings. With the client's history of several medical diagnoses and treatments (please refer to the client's past medical and surgical history on page 2) and the chief complaints for this visit, the provider(s) is/are making sure no complications arose, causing the signs and symptoms the client is manifesting. The CXR came out with no adverse findings, so the provider(s) ordered Chest Computed Tomography (CT) with contrast to further the evaluation. Chest CT is a non-invasive yet accurate radiographic procedure used to diagnose pathologic conditions, particularly the thoracic organs (Pagana et al., 2021, p. 987). The CT image results from passing x-rays through the thoracic organs at many angles. The Chest CT came out with no acute adverse findings on the arteries of the chest.

Diagnostic Test Reference (1) (APA):

Pagana, T. J., Pagana, T. N., & Pagana, K. D. (2021). *Mosby's® Manual of Diagnostic and Laboratory Tests* (7th ed.). Elsevier - Health Sciences Division.

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

Home Medications (5 required)

Brand/Generic	**Synthroid** levothyroxine	**Norvasc** Amlodipine besylate	**Symbicort 160** budesonide+formoterol
Dose	150mcg/tab	10mg/tab	4.5mcg/tab
Frequency	Daily	Daily	BID
Route	PO	PO	PO
Classification	Thyroid Hormone Replacement (Jones & Bartlett Learning, 2021, p.774)	Calcium channel blocker (antihypertensive) (Jones & Bartlett Learning, 2021, p.67)	Corticosteroid (antiasthmatic) (Jones & Bartlett Learning, 2021, p.166)
Mechanism of Action	Replaces endogenous thyroid hormone. (Jones & Bartlett Learning, 2021, p.774)	Decrease peripheral vascular resistance and myocardial workload. (Jones & Bartlett Learning, 2021, p.68)	Inhibits inflammatory cells & mediators, decreasing influx into nasal passages. (Jones & Bartlett Learning, 2021, p.167)
Reason Client Taking	The client had a thyroidectomy.	The client is diagnosed with hypertension.	The client has COPD & which inhibits mucus secretion.
Contraindications (2)	• Uncorrected adrenal insufficiency. • D/D: antacids that could decrease absorption and reduce the effects of levothyroxine. (Jones & Bartlett Learning, 2021, p.775)	• D/D: ACE inhibitors (increased risk of hyperkalemia, hypotension, & renal dysfunction) • Sildenafil (excessive hypotension) (Jones & Bartlett Learning, 2021, p.68)	• Septal ulcers, surgery, or trauma. • D/D: antacids (dissolution of the coating may be altered) (Jones & Bartlett Learning, 2021, p.167)
Side Effects/Adverse Reactions (2)	• CNS: seizures • CV: Myocardial Infarction (Jones & Bartlett Learning, 2021, p.775)	• CV: arrhythmias • GI: pancreatitis (Jones & Bartlett Learning, 2021, p.68)	• CNS: benign intracranial HTN • RESP: bronchospasm (Jones & Bartlett Learning, 2021, p.168)
Nursing Considerations (2)	• Levothyroxine therapy is not a treatment for obesity or weight loss. • It should be started at a lower dose in clients with underlying cardiovascular disease. (Jones & Bartlett Learning, 2021, p.774)	• Use caution in clients with heart block, HF, or severe aortic stenosis. • Monitor BP while adjusting dosage (hypotension) (Jones & Bartlett Learning, 2021, p.68)	• Monitor clients with DM, cataracts, or HTN. • Use caution on clients with untreated fungal, bacterial, or viral infections. (Jones & Bartlett Learning, 2021, p.168)

Brand/Generic	**Cymbalta** Duloxetine hydrochloride	**Basaglar Kwik Pen** insulin glargine
Dose	30mg	100u/mL
Frequency	Daily	20u/12hrs/90days
Route	PO	SubQ
Classification	Selective Serotonin and norepinephrine reuptake inhibitor (SSRI) (Jones & Bartlett Learning, 2021, p.424)	Hormones (Vallerand, 2023)
Mechanism of Action	Inhibits dopamine, serotonin, & norepinephrine reuptake in the CNS. (Jones & Bartlett Learning, 2021, p.424)	Lowers blood glucose by stimulating glucose uptake in skeletal muscle and fat, inhibiting hepatic glucose production. (Vallerand, 2023)
Reason Client Taking	To relieve neuropathic pain of the client associated with diabetic peripheral neuropathy. (Jones & Bartlett Learning, 2021, p.424)	To control the hyperglycemia of the client with DM. (Vallerand, 2023)
Contraindications (2)	• Cirrhosis • D/D: Warfarin (increased risk of bleeding) (Jones & Bartlett Learning, 2021, p.424)	• Hypoglycemia • Stress and infection (Vallerand, 2023)
Side Effects/Adverse Reactions (2)	• CNS: suicidal ideation • GI: hepatotoxicity (Jones & Bartlett Learning, 2021, p.425)	• ENDO: hypoglycemia • F&E: hypokalemia (Vallerand, 2023)
Nursing Considerations (2)	• Should not be given to clients with severe renal impairment. • Obtain the client's baseline BP before therapy. (Jones & Bartlett Learning, 2021, p.424)	• Assess for symptoms of hypoglycemia and hyperglycemia. • Monitor body weight periodically. (Vallerand, 2023)

Hospital Medications (5 required)

Brand/Generic	**Mucomyst** acetylcysteine	**Lipitor** atorvastatin calcium	**Rocephin** ceftriaxone sodium
Dose	20% / 1mL	40mg	2g
Frequency	TID	Daily	Q24hrs
Route	Nebulizer	PO	IV
Classification	Mucolytic (Jones & Bartlett Learning, 2021, p.14)	Antihyperlipidemic (Jones & Bartlett Learning, 2021, p.113)	Antibiotic (Jones & Bartlett Learning, 2021, p.239)
Mechanism of Action	Decreases viscosity of pulmonary secretions by breaking disulfide links that bind glycoproteins in mucus. (Jones & Bartlett Learning, 2021, p.15)	Reduces plasma cholesterol & lipoprotein levels by inhibiting cholesterol synthesis. (Jones & Bartlett Learning, 2021, p.114)	Interferes with bacterial cell wall synthesis by inhibiting peptidoglycan strands from cross-linking. (Jones & Bartlett Learning, 2021, p.241)
Reason Client Taking	To liquify thickened mucus of the client due to the COPD (Jones & Bartlett Learning, 2021, p.15)	To reduce the client's risk of CVA, CAD, or MI. (Jones & Bartlett Learning, 2021, p.114)	The client's WBC is elevated, which could mean an infection.
Contraindications (2)	• D/D: Nitroglycerin (headache & hypotension) • Activated Charcoal (decreased effectiveness) (Jones & Bartlett Learning, 2021, p.15)	• Active hepatic disease. • D/D: Azole antifungals (Increased risk of myopathy & rhabdomyolysis. (Jones & Bartlett Learning, 2021, p.114)	• Hypersensitivity to beta-lactam antibacterial or cephalosporins. • D/D: Loop diuretics (increased risk of nephrotoxicity) (Jones & Bartlett Learning, 2021, p.241)
Side Effects /Adverse Reactions (2)	• CV: hypotension • RESP: bronchospasms (Jones & Bartlett Learning, 2021, p.16)	• CV: arrhythmias • GI: pancreatitis (Jones & Bartlett Learning, 2021, p.114)	• CNS: seizures • GI: Clostridium difficile (C-Diff) diarrhea (Jones & Bartlett Learning, 2021, p.241)
Nursing Considerations (2)	• Use caution with clients with asthma or bronchospasm. • Instruct the client to wash their face and rinse their mouth for sticky residues. (Jones & Bartlett Learning, 2021, p.424)	• Use caution when administering to clients who consume substantial quantities of alcohol. • Monitor blood glucose levels, for it can affect blood glucose control. (Jones & Bartlett Learning, 2021, p.114)	• Always check and ask clients if they have antibiotic allergies! • Obtain blood-culture tests before administering the drug. (Jones & Bartlett Learning, 2021, p.241)

Brand/Generic	**Lovenox** Enoxaparin sodium	**Benadryl** diphenhydramine
Dose	40mg	25mg
Frequency	Q24hrs	Once
Route	SubQ	IV
Classification	Anticoagulant (Jones & Bartlett Learning, 2021, p.452)	Antidyskinetic, antiemetic, antihistamine, antivertigo, sedative-hypnotic (Jones & Bartlett Learning, 2021, p.390)
Mechanism of Action	Potentiates the action of antithrombin III, a coagulation inhibitor. (Jones & Bartlett Learning, 2021, p.453)	Its sedative effects are related to its CNS depressant action. (Jones & Bartlett Learning, 2021, p.391)
Reason Client Taking	To prevent DVT while the client is in the hospital with or without PE. (Jones & Bartlett Learning, 2021, p.452)	The client complained of a headache caused by a lack of sleep.
Contraindications (2)	• Active bleeding. • D/D: NSAIDS (increased bleeding) (Jones & Bartlett Learning, 2021, p.454)	• Similar antihistamines • D/D: MAOI (increased anticholinergic & CNS depressant) (Jones & Bartlett Learning, 2021, p.391)
Side Effects /Adverse Reactions (2)	• CV: atrial fibrillation • RESP: pulmonary embolism (PE) (Jones & Bartlett Learning, 2021, p.454)	• CV: arrhythmias • HEME: thrombocytopenia (Jones & Bartlett Learning, 2021, p.391)
Nursing Considerations (2)	• Use caution in clients with an increased risk of hemorrhage. • Keep protamine sulfate in case of accidental overdose. (Jones & Bartlett Learning, 2021, p.455)	• Urge clients to avoid alcohol while taking diphenhydramine. • Advise client to take the drug with food to minimize GI discomfort. (Jones & Bartlett Learning, 2021, p.391)

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2021). *2022 Nurse's Drug Handbook* (Jones & Bartlett Learning, Ed.). Jones & Bartlett Learning.

Vallerand, A. H., et al., (2022). *Davis Drug Guide for Nurses* (Version 6.4.0.539). [Mobile App]. App Store.

Assessment

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

GENERAL: **Alertness:** noted **Orientation:** noted **Distress:** no **Overall appearance:** well-groomed	ALERTNESS & ORIENTATION: The client is alert and oriented to person, place, time, and situation. APPEARANCE: The client is well-groomed and wearing an appropriate hospital gown. The client appears sad and depressed. DISTRESS: The client appears to be in no acute distress, although the client's chief complaint is SOB.
INTEGUMENTARY: **Skin color:** dark brown **Character:** dry with surgical marks **Temperature:** warm **Turgor:** normal **Rashes:** none **Bruises:** none **Wounds:** none **Braden Score: 21** **Drains present: Y☐ N■** **Type:**	HAIR: Hair is evenly and finely distributed. SKIN COLOR: The skin is usual for ethnicity, dark brown color. CHARACTER: Skin is dry and intact, with no rashes, lesions, or bruising. Some signs of healed burns on both arms from frying food, according to the client. TEMPERATURE: Skin is warm and dry upon palpation. TURGOR: The client's skin has normal mobility. CAPILLARY REFILL: The client's capillary refill on the fingers shows signs of clubbing bilaterally. Capillary refills on the toes are <3 seconds bilaterally. BRADEN SCORE: 21
HEENT: **Head/Neck:** noted **Ears:** noted **Eyes:** noted **Nose:** noted **Teeth:** dentures	HEAD: Symmetrical and round. The hair is curly black with traces of grey and white. NECK: Symmetrical, trachea is midline without deviation, the thyroid gland is not present (Thyroidectomy), no noted nodules. Bilateral carotid pulses are palpable +2. No lymphadenopathy in the head or neck was noted. EYES: Bilateral scleras are white, bilateral cornea clear, the client has a history of cataract removal bilaterally, bilateral conjunctivas are light pink, no visible drainage from both eyes, bilateral eyelids are moist and pink without lesions or discharge. PERRLA bilaterally. EOM intact bilaterally. EARS: Bilateral auricles show no visible lesions, lumps, nor deformities except for the LT posterior ear surgical scar (mastoidectomy) MOUTH/TEETH: Pink and moist gums with no dentition. NOSE: Nose is midline with no signs of lumps, rashes, lesions, or deformities.

CARDIOVASCULAR: **Heart sounds:** noted **S1, S2, S3, S4, murmur etc.** none noted **Cardiac rhythm (if applicable):** none **Peripheral Pulses:** noted **Capillary refill:** clubbing of fingers **Neck Vein Distention:** **Y☐ N■** **Edema Y■ N☐** **Location of Edema: left lower feet**	HEART SOUNDS: Clear S1 & S2 without murmurs, gallops or rubs. PERIPHERAL PULSES: Peripheral pulses 3+ bilaterally. CAPILLARY REFILLS: Capillary refills on the fingers show signs of clubbing. EDEMA: Pitting edema 1+ on the LT dorsal side.
RESPIRATORY: **Accessory muscle use:** **Y☐ N■** **Breath Sounds: Location, character**	RESPIRATIONS: Normal rate and pattern of respirations. Respirations are symmetrical and slightly labored. BREATH SOUNDS: Lung sounds have slight wheezing anteriorly and posteriorly bilaterally.
GASTROINTESTINAL: **Diet at home:** regular per client **Current Diet:** carb consistency **Height:** 6' 1" **Weight:** 251 lbs **Auscultation Bowel sounds:** normoactive **Last BM:** 1/27/2023, Friday **Palpation: Pain, Mass etc.:** none **Inspection:** good **Distention:** none **Incisions:** none **Scars:** L posterior ear, anterior chest, L medial leg, R carpal palm, R pinky **Drains:** none **Wounds:** none **Ostomy:** **Y☐ N■** **Nasogastric:** **Y☐ N■** **Size:** **Feeding tubes/PEG tube** **Y☐ N■** **Type:**	BOWEL SOUNDS: Bowel sounds were normoactive upon auscultation on the abdomen quadrants. And Abdomen is dry, soft, a little tender on RLQ, per client. No organomegaly was noted on all four quadrants. The abdomen shows no rashes, lesions, lumps, or deformities.
GENITOURINARY: **Color:** yellow **Character:** clear **Quantity of urine:** normal **Pain with urination:** **Y☐ N■** **Dialysis:** **Y☐ N■** **Inspection of genitals:** **Catheter:** **Y☐ N■** **Type:** N/A **Size:** N/A	COLOR: Yellow CHARACTERISTIC: Clear
MUSCULOSKELETAL:	NEUROVASCULAR: The client's nailbeds show

Neurovascular status: **ROM:** active, with minimal assistance **Supportive devices:** none **Strength:** normal and equal **ADL Assistance:** **Y☐ N■** **Fall Risk:** **Y■ N☐** **Fall Score: 79, high risk** **Activity/Mobility Status:** **Independent (up ad lib) ■** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	signs of clubbing. ROM: all extremities have active ROM. STRENGTH: Hand grips, pedal pushes, and pedal pulls showed normal and equal strength of 5/5. FALL SCORE: 79, high risk
NEUROLOGICAL: **MAEW:** **Y■ N☐** **PERLA:** **Y■ N☐** **Strength Equal:** **Y■ N☐** **if no - Legs☐ Arms☐ Both☐** **Orientation:** noted **Mental Status:** noted **Speech:** clear with some hoarseness **Sensory:** normal **LOC:** alert	ORIENTATION: The client is alert and oriented to person, place, time, and situation. COGNITION/MENTAL: The client's cognition is normal SPEECH: The client's speech is clear, with some hoarseness. LOC: The client is alert and awake and answers questions appropriately.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** boyfriend and children **Developmental level:** Generativity vs. Stagnation **Religion & what it means to pt.:** the client did not want to talk about it at this time **Personal/Family Data (Think about home environment, family structure, and available family support):** the client is grieving for the lost of eldest daughter	COPING METHODS: The client denies any connection with any religious activity. The client mentioned smoking as her coping method. DEVELOPMENTAL LEVEL: The client states that she only finished 12th grade due to getting pregnant at age 15 years old.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1125	66	109/61	18	98.1 Temporal	98% Room Air
1515	75	147/81	20	98.3 Temporal	98% Room Air

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1300	Numerical	Head	8	Throbbing	Benadryl & Zofran IV push
1520	Numerical	Head	8	Throbbing	RN called MD for advice

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 22 gauge **Location of IV:** R anterior arm **Date on IV:** 1/30/2023 **Patency of IV:** IV is patent. **Signs of erythema, drainage, etc.:** none **IV dressing assessment:** clean, dry, intact with no signs of infiltration, phlebitis, extravasation or infection	The Student RN, under the supervision of the staff RN, administered 250mL of 0.9% NaCl to run in an hour with the Benadryl & Zofran IV push. After infusion, the Student RN disconnected IV and secured it with a saline lock.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
250mL 0.9% NaCl	500mL yellow urine

Nursing Care

Summary of Care (2 points)

Overview of care: Student RN arrived at the medical and surgical unit on 4 East around 1300 after a short stay with RN Matt in the OR. Student RN was introduced to staff RN Katie by clinical instructor Prof. Kristal Henry. After the brief introduction, the clinical instructor introduced the student RN to the client. Nurse-Client Relationship initiated by a brief

introduction. Student RN assured the client of returning after studying the client's charts, ensuring appropriate client care is achieved. The client agreed, and the student RN assessed the client's pain, to which the client replied with a throbbing headache complaint of 8. The student RN went back to the staff RN and informed her about the client's complaint.

Procedures/testing done: The student RN conducted Head to Toe assessment after the client returned from the CT Scan procedure. The student RN administered Benadryl and Zofran IV push to treat the aforementioned headache with the staff RN supervising. Student RN was also able to prime, program, and administer 250mL of 0.9% for an hour.

Complaints/Issues: The client complained of a throbbing headache of 8 on a scale of 0-10 numerical scale.

Vital signs (stable/unstable): The vital signs were generally stable except for the last blood pressure at 1515, which is higher due to the throbbing headache the client complained of.

Tolerating diet, activity, etc.: The client was not scheduled to eat since the student RN came after lunch and left before supper time. After a few minutes of the IV infusion, the client requested the student RN to accompany her to the bathroom to void urine. The student RN assisted the client to the bathroom by unplugging the IV pump from the outlet and bringing the IV pole and pump inside the bathroom. The student RN stood by the door that was slightly opened to ensure the safety of the client, who was a high risk for falls.

Physician notifications: Student RN informed staff RN Katie of the client's headache complaint and called the MD for advice since the ordered prescriptions for headache were given at 1400.

Future plans for the client: Student RN should emphasize smoking cessation education for the client. Although the client already said not to stop smoking, I quote, "Smoking is the

only thing that relaxes me and gets me through the loss of my daughter two months ago. So I am not going to quit again!"

Discharge Planning (2 points)

Discharge location: The client will be discharged and return home with her boyfriend.

Home health needs (if applicable): The client can take care of herself.

Equipment needs (if applicable): Although the client could ambulate alone, it is essential to reiterate that ambulatory accessories must be used to avoid falls.

Follow-up plan: The client should visit her primary care physician to help her start thinking about smoking cessation.

Education needs: Since the client informed the student RN that the client was only able to finish 12th grade, It is essential to educate the client on smoking cessation and the long-term benefits of not smoking. The client has been smoking for almost half a century. Furthermore, cognitive behavior might be affected by the client's educational attainment.

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. Ineffective airway clearance related to Chronic Obstructive Pulmonary Disease diagnosis as evidenced by the client's chief complaint of shortness of breath.	Because of the client's long history of smoking and diagnosis of COPD, the client is showing signs of worsening disease manifested by the clubbing of the client's nailbeds.	**1.** Assess the client for changes in the respiratory rate, depth, and use of accessory muscles or tripod positioning. **2.** Use continuous pulse oximetry to monitor oxygen saturation and test for ABGs. (Gulanick & Myers, 2021, p. 413)	The client will maintain a clear open airway, as evidenced by normal breath sounds, normal rate and depth of respirations, and ability to cough up secretions. (Gulanick & Myers, 2021, p. 413)	The client's family will be able to observe better respirations from the client before hospital discharge. The client will acknowledge the absence of shortness of breath and feels comfortable in fulfilling ADLs.
2. Risk for unstable blood glucose level related to the hyperglycemic lab value as evidenced by the Chemistry Blood Glucose and the HA1c lab results.	The client denies not taking her medications for DM, but the HA1c (10.2) and Blood Glucose (252) lab results are way over the limit.	**1.** Assess the client's prior efforts to manage the diabetes care regimen. **2.** Evaluate the client's self-management skills, including the ability to perform procedures for blood glucose monitoring. (Gulanick & Myers, 2021, p.878)	The client verbalizes her intention to follow the prescribed regimen, nutrition, and treatment plan for her Type I DM prior to her discharge. (Gulanick & Myers, 2021, p.878)	The client's family will support the client in lowering her blood glucose levels by understanding the importance of following a strict diabetic diet and adhering to the prescribed medications by the provider. The client should record daily glucose test readings to ensure the regimen and treatment are effective.
3. Readiness for enhanced health management related to the defiance of the client to stop smoking as evidenced by the client's relapse from the 21-months smoking sobriety.	The client disclosed that she started smoking 47 packs per year when she was 15 years old, stopped for 21 months, and relapsed after her eldest daughter died two months ago.	**1.** Provide the client with a rationale for the importance of smoking cessation. **2.** Involve the client's family and significant other in health planning. (Gulanick & Myers, 2021, p. 61)	The client will demonstrate positive health maintenance behaviors by keeping scheduled appointments, participating in smoking and substance abuse programs, and following a treatment regimen. (Gulanick & Myers, 2021, p. 61)	The client and the client's family will gain more knowledge related to the benefits of smoking cessation. The client will also be able to understand that smoking is an ineffective coping strategy that could only cause more harm to her health.

Other References (APA):

Gulanick, M., & Myers, J. L. (2021). *Nursing Care Plans: Diagnoses, Interventions, and Outcomes* (J. L. Myers & M. Gulanick, Eds.; 10th ed.). Elsevier.

Concept Map (20 Points): (Next Page Please…)

SUBJECTIVE DATA

The client's chief complaint was, ***"I was not feeling good!" "I could not breath easily!" "I was coughing hard!" "I started smoking again after my eldest daughter passed away two months ago."***

NURSING DIAGNOSES/OUTCOMES

1. **Ineffective airway clearance related to Chronic Obstructive Pulmonary Disease diagnosis as evidenced by the client's chief complaint of shortness of breath.**
   Outcome: The client will maintain a clear open airway, as evidenced by normal breath sounds, normal rate and depth of respirations, and ability to cough up secretions.
2. **Risk for unstable blood glucose level related to the hyperglycemic lab value as evidenced by the Chemistry Blood Glucose and the HA1c lab results.**
   Outcome: The client verbalizes her intention to follow the prescribed regimen, nutrition, and treatment plan for her Type I DM prior to her discharge.
3. **Readiness for enhanced health management related to the defiance of the client to stop smoking as evidenced by the client's relapse from the 21-months smoking sobriety.**
   Outcome: The client will demonstrate positive health maintenance behaviors by keeping scheduled appointments, participating in smoking and substance abuse programs, and following a treatment regimen.

OBJECTIVE DATA

Temp: ***98.3ºF, Temporal***
BP: ***147/81***
*Pulse:****75***
RR: ***20***
SaO_2: ***98%***
Pain: ***8, Throbbing Headache***

Chemistry	Others	Hematology
Na: 141	TNI: <0.3	RBC: 4.01
K:3.6	CK-MB: N/A	Hgb: 11.8
Cl: 104	INR: 1	Hct: 36.4%
CO_2: 28	PT: 10.7	Platelets: 287
Glu: 252	PTT: 31	WBC: 14.2
BUN: 15	Lactic: 2.3	Neutrophils: 67.6%
Crea: 0.88	HA1c: 10.2	Lymphocytes: 21.8%
Albumin: 3.5		Monocytes: 10.1%
Ca: 8.7		Eosinophils: 1.2%
Mg: 1.6		Bands: N/A
Phos: N/A	Cultures:	
Bilirubin: 0.2	Urine: N/A	
Alk Phos:89	Blood: Neg	
AST: 14	Sputum: N/A	
ALT: 17	Stool: N/A	

CLIENT INFORMATION

"66-year-old female with a history of COPD is admitted to the emergency department for acute exacerbation of COPD."

DOA: ***01/28/2023***
INITIALS: ***M.L.***
Cultures:
GENDER: ***Female***
RACE/ETHNICITY: ***African American***
OCCUPATION: ***On Disability***
MARITAL STATUS: ***Divorced***
CODE STATUS: ***Full Code***
HEIGHT: ***6'1"***
WEIGHT: ***251 lbs***
BMI: ***33.19 kg/m²***

NURSING INTERVENTIONS

- *Assess the client for changes in the respiratory rate, depth, and use of accessory muscles or tripod positioning.*
- *Use continuous pulse oximetry to monitor oxygen saturation and test for ABGs.*
- *Assess the client's prior efforts to manage the diabetes care regimen.*
- *Evaluate the client's self-management skills, including the ability to perform procedures for blood glucose monitoring.*
- *Provide the client with a rationale for the importance of smoking cessation.*
- *Involve the client's family and significant other in health planning.*

References:

Capriotti, T. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives* (2nd ed.). F. A. Davis Company.

COPD - Symptoms and causes. (2020, April 15). Mayo Clinic. Retrieved January 30, 2023, from https://www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679.

Gulanick, M., & Myers, J. L. (2021). *Nursing Care Plans: Diagnoses, Interventions, and Outcomes* (J. L. Myers & M. Gulanick, Eds.; 10th ed.). Elsevier.

Jones & Bartlett Learning. (2021). *2022 Nurse's Drug Handbook* (Jones & Bartlett Learning, Ed.). Jones & Bartlett Learning.

Pagana, T. J., Pagana, T. N., & Pagana, K. D. (2021). *Mosby's® Manual of Diagnostic and Laboratory Tests* (7th ed.). Elsevier - Health Sciences Division.

Vallerand, A. H., et al., (2022). *Davis Drug Guide for Nurses* (Version 6.4.0.539). [Mobile App]. App Store.