N431 Care Plan # 1

Lakeview College of Nursing

Alfonso Crane

Demographics (3 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
09/01/2022	A.M.	67	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Supervisor	Married	None
Code Status	**Height**	**Weight**	
DNR	157.5 cm	104.7 kg	

Medical History (5 Points)

Past Medical History: Anemia, HLD, arthritis, LUL nodule, Esophageal CA, depression, GERD

Past Surgical History: Aorta-Iliac-Femoral Bypass, Infusaport insertion

Family History: Maternal: None | Paternal: Unknown malignancy

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): The client does not use alcohol and has no illicit drug use. Former smoker, (~40-45 packs/year).

Assistive Devices: Walker

Living Situation: Lives with husband.

Education Level: College

Admission Assessment

Chief Complaint (2 points): Shortness of breath, due to copious secretions and tracheostomy insertion.

History of Present Illness – OLD CARTS (10 points): The patient is a 67-year-old female with a history of glottic cancer status post tracheostomy for airway compromise. The patient is admitted for copious secretion production and a diagnosis of tracheobronchitis. The patient appears to be in no acute distress. When discussing pain, the patient communicated on a white board that their pain is at a 0 on a 0-10 pain scale. Upon arrival, a sputum culture was obtained;

five days later resulting in pseudomonas. The patient continues tube feeding via a PEG tube. A pulmonary consult discussing further tracheostomy care/management and antibiotic treatment is recommended and discussed with the patient.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Tracheobronchitis

Secondary Diagnosis (if applicable): Pseudomonas respiratory infection

Pathophysiology of the Disease, APA format (20 points): Pathophysiology of primary diagnosis can be found on page 4 of Care Plan

Pathophysiology References (2) (APA):

Capriotti, T. (2020). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

Carle Database (2022)

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

Holman, H. C., Williams, D., Sommer, S., Johnson, J., Ball, B. S., Wheless, L., Leehy, P., & Lemon, T. (2019). *RN Adult Medical Surgical Nursing: Review module* (11th ed.). Assessment Technologies Institute.

Pathophysiology of Tracheobronchitis

Tracheobronchitis is an acute inflammation of the mucous membranes of the trachea and the bronchial tree (Hinkle & Cheever, 2022). Tracheobronchitis is secondary to upper respiratory tract infections resulting from a viral infection (Hinkle & Cheever, 2022). Appropriate and adequate treatment of upper respiratory tract infections is one of the significant factors in preventing tracheobronchitis. The inflamed mucosa of the bronchi produces mucopurulent sputum, often in response to infection by bacteria, such as *streptococcus pneumonia*, or fungal infections, such as *Aspergillus* (Hinkle & Cheever, 2022). A sputum culture is essential in identifying the specific bacteria, fungus, or virus causing infection (Hinkle & Cheever, 2022).

The signs and symptoms of tracheobronchitis include an initial dry and irritating cough. Copious mucosal secretions and sternal soreness from coughing are also clinical manifestations of tracheobronchitis (Hinkle & Cheever, 2022). The patient can also experience symptoms such as fever or chills, night sweats, headache, in general malaise (Hinkle & Cheever, 2022). As tracheobronchitis progresses, the patient may also experience dyspnea. In severe cases of trachea bronchitis, blood-tinged mucosal secretions may be present as a result of the irritation of the mucosa of the airways (Hinkle & Cheever, 2022).

Expected findings related to tracheobronchitis include changes in vital signs and changes in laboratory findings. Vital sign changes are most frequently related to hypoxemia, which refers to diminished O2 levels in the blood (Capriotti, 2020). Indications for vital sign changes include tachycardia, dyspnea, increased respiratory rate, and a fever (Capriotti, 2020). Characteristic laboratory findings related to tracheobronchitis include an abnormal sputum culture result and abnormal CBC lab values. Because tracheobronchitis is a respiratory infection, lab values such as platelets and white blood cells can appear abnormal (Hinkle & Cheever, 2022).

Diagnostic tests used to identify tracheobronchitis are pulmonary function tests and chest X-rays (Hinkle & Cheever, 2022). A chest X-ray was performed on the client to help diagnose tracheobronchitis (Carle Database, 2022). Although the findings and impression were unavailable, a chest X-ray is most commonly used to detect lung abnormalities. Aside from detecting lung abnormalities, chest X-rays can also detect abnormalities in the heart and the bones of the thoracic area (Holman et al., 2019). Clinical findings that correlate with this client and are associated with tracheobronchitis include dyspnea.

Treatment and nursing management for trachea bronchitis depends on the infection's symptoms and severity. Increased fluid intake and directed coughing to remove secretions are effective ways to manage and treat tracheobronchitis (Hinkle & Cheever, 2022). Increasing fluids is pertinent for thinning secretions that cannot be cleared by coughing. Fluid intake lowers the risk of increasing airway obstruction and the development of lower respiratory tract infections, such as pneumonia (Hinkle & Cheever, 2022). Treatment for the client included tracheostomy care and suctioning and medicinal treatment. The client was given guaifenesin every four hours to thin secretions and cefepime every six hours as antibiotic treatment.

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 (Carle Database, 2022)	Admission Value	Today's Value	Reason for Abnormal Value
RBC (x 10^6)	3.5-5.2	3.23	3.14	Anemia can cause a low RBC value (Capriotti, 2020). The patient has a history of anemia.
Hgb (g/dL)	11-16.8	9.4	9.1	Malnutrition and anemia can cause a low Hgb value (Capriotti, 2020). The patient had been on an NPO diet and has a history of anemia.
Hct	34%-47%	29.7	29.4	Anemia can cause a low Hct value (Capriotti, 2020). The patient has a history of anemia.
Platelets	140,000-400,000	117,000	95,000	Anemia can cause a low platelet value (Capriotti, 2020). The patient has a history of anemia.
WBC (cells/mcL)	4,000-11,000	3,360	2,020	Anemia can cause a low WBC value (Capriotti, 2020). The patient has a history of anemia.
Neutrophils	40%-80%	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Lymphocytes	20%-40%	6.2%	9.6%	Decreased lymphocyte value can indicate immune deficiency and can be seen in patients with anemia (Hinkle & Cheever, 2022). The patient has a history of anemia.
Monocytes	2%-10%	8.8%	11.3%	A patient with an infection can have an increased monocyte value (Hinkle & Cheever, 2022). The patient was diagnosed with tracheobronchitis and pseudomonas respiratory infection.
Eosinophils	0%-8%	0%	0.9%	This value is within normal limits.
Bands	0%-10%	3.5%	1.7%	This value is within normal limits.

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

Lab	Normal Range (Carle Database, 2022) (Hinkle &	Admission Value	Today's Value	Reason For Abnormal

	Cheever, 2022)			
Na- (mmol/ L)	136-145	139	140	This value is within normal limits.
K+ (mmol/L)	3.5-5.1	3.4	4.2	This value is within normal limits.
Cl- (mmol/L)	98-107	108	109	An electrolyte imbalance caused by dehydration can cause an increased level of chloride (Hinkle & Cheever, 2022). The patient was on an NPO diet.
CO2 (mmol/ L)	22-29	19	25	This value is within normal limits.
Glucose (mg/dL)	74-100	105	91	This value is within normal limits.
BUN (mg/dL)	10-20	9	6	Malnutrition can cause a low calcium level (Capriotti, 2020). The patient was on an NPO diet.
Creatinine (mg/dL)	0.55-1.02	0.58	0.55	This value is within normal limits.
Albumin (g/ dL)	3.5-5	2.7	N/A	There was no lab value on the date of assessment: 09/07/2022
Calcium (mg/dL)	8.9-10.6	8.1	N/A	There was no lab value on the date of assessment: 09/07/2022
Mag (mg/dL)	1.6-2.6	1.7	N/A	There was no lab value on the date of assessment: 09/07/2022
Phosphate (mg/dL)	2.5-4.5	2.3	N/A	There was no lab value on the date of assessment: 09/07/2022
Bilirubin (mg/dL)	0.2-1.6	1.4	N/A	There was no lab value on the date of assessment: 09/07/2022
Alk Phos (U/ L)	40-150	81	N/A	There was no lab value on the date of assessment: 09/07/2022
AST (U/L)	5-34	13	N/A	There was no lab value on the date of assessment: 09/07/2022
ALT (U/L)	0-55	8	N/A	There was no lab value on the date of assessment: 09/07/2022
Amylase (U/ L)	25-125	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022

Lipase (U/L)	<140	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Lactic Acid (mmol/L)	Venous: 0.5-1.7 Arterial: 0.36-1.25	1.1	N/A	There was no lab value on the date of assessment: 09/07/2022
Troponin (ng/mL)	0.0001-0.12	0.0230	N/A	There was no lab value on the date of assessment: 09/07/2022
CK-MB	5-25 IU/L	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Total CK	22-198 U/L	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022

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

Lab Test	**Normal Range** (Hinkle & Cheever, 2022)	**Value on Admission**	**Today's Value**	**Reason for Abnormal**
INR	0.8-1.2	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
PT	11 sec – 13 sec	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
PTT	21 sec – 35 sec	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
D-Dimer (ng/mL)	< 250	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
BNP (pg/mL)	< 100	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
HDL (mg/dL)	Males: 35-65 Females: 35-80	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
LDL (mg/dL)	<160 if no CAD and <2 risk factors <130 if no CAD and 2+ risk factors <100 if CAD is present.	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Cholesterol (mg/dL)	Males: <205 Females: <190	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Triglycerides (mg/dL)	Males: 44-180 Females: 10-190	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Hgb A1c	4.4% - 6.4%	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
TSH (mIU/L)	0 - 15	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022

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

Lab Test	Normal Range (Carle Database, 2022)	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow to amber Clear to slightly hazy	Yellow, slightly hazy	N/A	There was no lab value on the date of assessment: 09/07/2022
pH	5.0-9.0	7.0	N/A	There was no lab value on the date of assessment: 09/07/2022
Specific Gravity	1.003-1.030	1.010	N/A	There was no lab value on the date of assessment: 09/07/2022
Glucose	Negative	Negative	N/A	There was no lab value on the date of assessment: 09/07/2022
Protein	Negative	Negative	N/A	There was no lab value on the date of assessment: 09/07/2022
Ketones	Negative	Negative	N/A	There was no lab value on the date of assessment: 09/07/2022
WBC	Negative/0-5	6-10	N/A	There was no lab value on the date of assessment: 09/07/2022
RBC	Negative/0-2	6-10	N/A	There was no lab value on the date of assessment: 09/07/2022
Leukoesterase	Negative	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022

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

Test	Normal Range (Carle Database, 2022)	Value on Admission	Today's Value	Explanation of Findings
pH	7.35-7.45	7.53	N/A	There was no lab value on the date of assessment: 09/07/2022
PaO2	80-100	88	N/A	There was no lab value on the date of assessment: 09/07/2022
PaCO2	35-45	22	N/A	There was no lab value on the date of assessment: 09/07/2022
HCO3	22-26	18	N/A	There was no lab value on the date of assessment: 09/07/2022
SaO2	92%-100%	98%	100%	This value is within normal limits.

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

Test	Normal Range (Carle Database, 2022)	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	<100,000 CFU/mL	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Blood Culture	Negative	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022
Sputum Culture	Normal	Abnormal	N/A	Positive for pseudomonas respiratory infection.
Stool Culture	Negative	N/A	N/A	There was no lab value on the date of assessment: 09/07/2022

Lab Correlations Reference (1) (APA):

Capriotti, T. (2020). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis.

Carle Database (2022)

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): See below.

Diagnostic Test Correlation (5 points): See below.

Chest Radiograph (CXR)

What is a chest radiograph?

- A chest radiograph, or chest x-ray, is a projection radiograph of the chest used to diagnose conditions affecting the heart (i.e., hypertension). A chest radiograph produces images of the heart, lungs, blood vessels, airways, and bones of your chest and spine (Holman et al., 2019).
    - A chest x-ray can show cardiomegaly (Holman et al., 2019).

Performed on: 09/01/2022

Procedure: Chest x-ray

History: 67-year-old female with tracheostomy.

Reason for Exam: Dyspnea.

- The CXR can show signs of conditions such a pneumonia or other lung problems. These conditions can be the reason that the patient is experiencing dyspnea.

No further information provided, as result was locked in for only the physician to see.

Diagnostic Test Reference (1) (APA):

Carle Database (2022)

Holman, H. C., Williams, D., Sommer, S., Johnson, J., Ball, B. S., Wheless, L., Leehy, P., & Lemon, T. (2019). *RN Adult Medical Surgical Nursing: Review module* (11th ed.). Assessment Technologies Institute.

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

Home Medications (5 required) (Carle Database, 2022), (Jones and Bartlett Learning, 2021)

Brand/Generic	***G:*** sertraline ***B:*** Zoloft	***G:*** omeprazole ***B:*** Losec (CAN), Prilosec	***G:*** atorvastatin ***B:*** Lipitor	***G:*** naproxen sodium ***B:*** Aleve	***G:*** acetaminophen ***B:*** Tylenol
Dose	50 mg (1 tab)	40 mg (1 capsule)	40 mg (1 tab)	220 mg (1 capsule)	1000 mg
Frequency	Daily	Daily	Daily	Q 12 hours PRN for pain.	Q 6 hours PRN for pain/fever.
Route	G-tube	G-tube	G-tube	G-tube	G-tube
Classification	***Pharm:*** Selective serotonin reuptake inhibitor (SSRI) ***Therapeutic:*** Antianxiety, antidepressant, antiobsessant, antipanic, antiposttraumatic stress, antipremenstrual dysphoric	***Pharm:*** Proton pump inhibitor. ***Therapeutic:*** Antiulcer	***Pharm:*** HMG-CoA reductase inhibitor ***Therapeutic:*** Antihyperlipidemic	***Pharm:*** NSAID ***Therapeutic:*** Analgesic	***Pharm:*** Nonsalicylate, para-aminophenol derivative. ***Therapeutic:*** Antipyretic, nonopioid analgesic
Mechanism of Action	Inhibits reuptake of serotonin by CNS neurons, increasing the amount of serotonin available in nerve synapses. Elevates mood, and this action may also relieve symptoms of other psychiatric conditions.	Interferes with gastric acid secretion by inhibiting the hydrogen potassium adenosine triphosphatase enzyme system, or proton pump, in gastric parietal cells.	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and by increasing the number of LDL receptors on liver cells to enhance uptake and breakdown.	Blocks cyclooxygenase, the enzyme needed to synthesize prostaglandins, which mediate the inflammatory response and cause local pain, swelling, and vasodilation.	Inhibits enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.
Reason Client	To treat major	To treat symptomatic	To control lipid levels	To relieve	To relieve mild to

Taking	depression.	GERD.		musculoskeletal pain.	moderate pain.
Contraindications (2)	(1) Concurrent use of disulfiram or pimozide. (2) Hypersensitivity to sertraline or its components.	(1) Concurrent therapy with rilpivirine-containing products. (2) Hypersensitivity to omeprazole.	(1) Active hepatic disease. (2) Hypersensitivity to atorvastatin or its components.	(1) History asthma, urticaria, or other allergic type reactions induced by aspirin or other NSAIDs. (2) Hypersensitivity	(1) Hypersensitivity to acetaminophen. (2) Severe hepatic impairment.
Side Effects/Adverse Reactions (2)	(1) RESP: Bronchospasm (2) HEME: Thrombocytopenia	(1) RESP: Bronchospasm (2) HEME: Hemolytic anemia	(1) RESP: Dyspnea (2) HEME: Thrombocytopenia	(1) HEME: Aplastic anemia (2) HEME: Thrombocytopenia	(1) CV: Hypotension (2) HEME: Hemolytic anemia (with long term use).
Nursing Considerations (2)	(1) Monitor patient closely for evidence of GI bleeding, especially if the patient is taking an NSAID or warfarin. (2) When therapy stops, taper dosage to minimize adverse effects rather than stopping the drug abruptly.	(1) Give omeprazole before meals, preferably in the morning for once daily dosing. If needed, also give an antacid, as prescribed. (2) Know that because the drug can interfere with absorption of vitamin B12,	(1) Monitor diabetic patient's blood glucose levels because atorvastatin therapy can affect blood glucose control. (2) Expect liver function tests to be performed before atorvastatin therapy starts and then thereafter as clinically	(1) Know that the risks of heart failure increases with the use of NSAIDs such as naproxen. (2) Monitor CBC for decreased hemoglobin and hematocrit because the drug may worsen anemia.	(1) Use medication cautiously in patients with hepatic impairment or active hepatic disease, alcoholism, or severe malnutrition. (2) Monitor renal function in patients on long-term therapy.

		monitor patient for macrocytic anemia.	necessary.		
Key Nursing Assessment(s)/Lab (s) Prior to Administration	Monitor and report signs of serotonin syndrome.	Monitor CNS side effects (drowsiness, fatigue, weakness, headache), and report prolonged effects.	Assess any muscle pain, tenderness, or weakness, especially if accompanied by fever, malaise, and dark-colored urine.	Assess the patient's history of NSAIDs allergies.	Assess for pain by having the patient rate on a scale of 0-10.
Client Teaching Needs (2)	(1) Take sertraline at around the same time every day. (2) Take sertraline with or without food, avoiding foods high in tyramine, as it can result in sudden and dangerous increase in blood pressure.	(1) Take omeprazole before a meal, preferably in the morning. (2) The patient should monitor signs and symptoms of GERD and PUD when using omeprazole.	(1) Tell the patient to take the medication at the same time each day to maintain its effects. (2) Advise patient with diabetes to monitor blood glucose levels.	(1) Advise the patient to take the medication with food to reduce GI distress. (2) Caution the patient to avoid hazardous activities until the medication's CNS effects are known.	(1) Tell the patient that the tablets may be crushed or swallowed whole. (2) Teach patient to recognize signs of hepatotoxicity , such as bleeding, easy bruising and malaise.

Hospital Medications (5 required) (Carle Database, 2022), (Jones and Bartlett Learning, 2021)

Brand/Generic	***G:*** guaifenesin ***B:*** Mucinex	***G:*** pantoprazole injection ***B:*** Protonix	***G:*** Sodium chloride ***B:*** Normal Saline	***G:*** Cefepime ***B:*** Maxipime	N/A
Dose	10 mL	20 mL	4 mL	134.4 mL	N/

					A
Frequency	Q 4 hours	Daily	RT BID	Q 6 hours	N/A
Route	G-tube	IV push	Inhalation	IV push	N/A
Classification	***Pharm:*** Expectorant ***Therapeutic:*** Mucolytic	***Pharm:*** Proton pump inhibitor ***Therapeutic:*** Antiulcer	Crystalloid Fluid	***Pharm:*** Fourth generation cephalosporin ***Therapeutic:*** Antibiotic	N/A
Mechanism of Action	Guaifenesin liquifies respiratory secretions allowing for easier removal. Moisturize the respiratory tract to make the mucus less tenacious.	Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphatase enzyme system. After this exchange, H+ and Cl- combine in the stomach to form HCl. Pantoprazole irreversibly prohibits the final step in gastric acid production by blocking the exchange of intracellular H+ and extracellular Cl-.	Sodium chloride is a source of water and electrolytes. It is capable of inducing diuresis depending on the clinical condition of the patient. It is given intravenously in case of shock, dehydration, and diarrhea to increase the plasma volume.	Interferes with bacterial cell wall synthesis by inhibiting the final step in the cross-linking of peptidoglycan strands. Without it, bacterial cell walls rupture and die.	N/A
Reason Client Taking	To thin mucous secretions, relieve chest congestions.	To treat erosive esophagitis associated with short-term GERD.	To thin mucus secretions, relieving chest congestion.	To treat mild to moderate UTI.	N/A
Contraindications (2)	(1) Hypersensitivity to guaifenesin. (2) Hypersensitivity to drug's	(1) Hypersensitivity to pantoprazole. (2) Hypersensitivity to benzimidazoles.	(1) Hypersensitivity to diuretics. (2) Hypersensitivity to steroids.	(3) Hypersensitivity to cefepime. (4) Hypersensitivity to other cephalosporins,	N/A

	components.			PCNs, or their components	
Side Effects/Adverse Reactions (2)	(1) GU: Nephrolithiasis (2) GI: Nausea	(1) HEME: Thrombocytopenia (2) RESP: Dyspnea	(1) RESP: Dyspnea (2) MS: Joint pain	(3) HEME: Hemolytic anemia (4) RESP: Dyspnea	N/A
Nursing Considerations (2)	**(1)** No eating or drinking for 30 minutes after giving liquid dose of Mucinex. **(2)** Encourage the patient to cough and deep breathe. Stay hydrated by drinking two to three liters per day.	(1) Be aware that a symptomatic response to a drug does not rule out the presence of a gastric tumor. (2) Know that proton pump inhibitors such as pantoprazole should not be given longer than medically necessary.	(1) The solution should not be administered orally or parenterally. (2) Check the breath sounds, pulse rates, and respiratory status during and after administration of inhalant.	(3) Monitor BUN and creatinine levels for early signs of nephrotoxicity. (4) Monitor fluid intake and output; decreasing urinary output can indicate nephrotoxicity.	N/A
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the quantity and consistency of sputum to help document whether this drug is successful in reducing the viscosity of respiratory secretions.	Assess the patient for signs and symptoms of stomach pain, heartburn or reflux, stomach upset, nausea or vomiting, and GI bleeding.	Before administering this medication, assess whether the patient is allergic to the medication or not.	Obtain C&S test results, if possible, as ordered, before giving medication	N/A
Client Teaching Needs (2)	(1) The patient should take care to avoid irritants that stimulate their	(1) Instruct the patient to swallow pantoprazole tablets whole and not to chew or	(1) Instruct the patient on how to properly use the nebulizer and have them	(1) Tell the patient to immediately report severe diarrhea to prescriber,	N/A

	cough. (2) Because this medication can cause drowsiness, the patient should avoid taking them with other CNS depressants or alcohol.	crush them. (2) Instruct the patient to notify the prescriber if diarrhea occurs and becomes prolonged or severe.	recite back that method. (2) If you store sodium chloride at home, keep it at room temperature away from moisture and heat.	(2) Instruct the patient and caregiver to immediately seek emergency care for any change in mental status, development of seizure activity, difficulty speaking or understanding spoken or written words, or sudden jerking movements.	

Medications Reference (1) (APA):

Carle Database (2022)

Jones & Bartlett Learning. (2021). *2021 Nurse's Drug Handbook* (20th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL: **Alertness:** Alert **Orientation:** Oriented x4 **Distress:** No acute distress **Overall appearance:** Groomed and awake.	Mrs. M is a 67-year-old female. The client is groomed and awake. Height 157.5 cm, weight 104.7 kg, BMI 42.21 kg/m^2, T 36.7°C oral, P 78 bpm 2+ b/l, RR 18, BP 135/58 L arm sitting, 100% O_2 on Optiflow 30/30. The client appears to be in no acute distress.
INTEGUMENTARY: **Skin color:** pale, pink **Character:** warm and dry **Temperature:** warm **Turgor:** less than two seconds **Rashes:** None **Bruises:** None **Wounds:** Throat pressure injury, coccyx pressure injury **Braden Score:** 20 (No risk) **Drains present:** **Y** ☐ **N** ☐ **Type:** PEG	Skin is warm and dry upon palpation. Skin turgor is less than two seconds, normal mobility. Nails are without clubbing. There are no rashes or bruises upon inspection. The client presents with a stage 2 throat pressure wound injury. The wound is dry, intact, clean, moist, and pink. Skin turgor is soft. Wound care: cleansed with sterile sodium chloride. Dressing for throat pressure wound was changed at 1130. The client presents with a coccyx pressure wound injury. The wound is red, blanched, warm, and soft upon palpation. The client's capillary refill is less than 3 seconds between fingers and toes bilaterally. Braden score of 20, indicating no risk. Based on assessment DOS: 09.07.2022
HEENT: **Head/Neck:** Skull is normocephalic. Tracheostomy placed. **Ears:** WNL **Eyes:** WNL – The client wears glasses **Nose:** WNL **Teeth:** Poor dentition	The client's head and neck are symmetrical. Tracheostomy placed and there are non-palpable lymph nodes and lobes. Tracheostomy care and suction performed at 1145. Emergency manual resuscitator located in room. There is acuity to regular voices. There is no visible abnormality of ears or palpable deformities. The sclera is white bilaterally. The client's cornea is clear b/l. Their conjunctiva is pink b/l with no mucus. The client wears glasses. Their EOMs are intact b/l and PERRLA b/l. The client's septum is midline. The client has had no oral/dental surgeries, but there is poor dentition. The client does not have dentures.
CARDIOVASCULAR: **Heart sounds:** Clear S1 and S2 w/o murmurs **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** None **Peripheral Pulses:** Pulses 2+ b/l **Capillary refill:** Less than 3 seconds **Neck Vein Distention:** **Y** ☐ **N** ☐ **Edema**	Upon auscultation, there are clear S1 and S2 without murmurs. The client's PMI is palpable at the 5th intercostal space at the MCL. There is a normal rate and rhythm. Mrs. M's extremities are pink, warm, and dry. There is no edema, palpated in all extremities. The epitrochlear lymph nodes are nonpalpable b/l. The client's pulses are 2+ b/l. Their capillary refill is less than 3 seconds

Y ☐ N ☐ **Location of Edema:** None	between fingers and toes b/l.
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	Upon auscultation, the client's lungs are resonant. Respirations are unlabored and slight wheezing noted anterior and posterior bilaterally. Former smoker; no history of illicit drug use. Esophageal CA.
GASTROINTESTINAL: **Diet at home:** Regular **Current Diet:** NPO **Height:** 157.5 cm **Weight:** 104.7 kg **Auscultation Bowel sounds:** Active in all four quadrants **Last BM:** 09/07/2022 **Palpation: Pain, Mass etc.:** No palpable mass or pain. **Inspection:** **Distention:** None **Incisions:** None **Scars:** None **Drains:** PEG tube **Wounds:** None **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:** Gastrostomy/Enterostomy Tube in LUQ.	Upon inspection, the client's abdomen flat. There are active and normal bowel sounds and no tenderness after palpation of all four quadrants. The client's BMI is 42.1 kg/m^2, indicating morbid obesity. Last BM on 09.07.2022 The client is on an NPO diet while at the hospital; denies nausea, pain, and vomiting. There is no pain with defecation. There is no distention, incisions, scars, or wounds visible on the abdomen. PEG drain located LUQ of abdomen with TF influsing, placed on 08.05.2022. There is no ostomy or NG tube in place for this client.
GENITOURINARY: **Color:** N/A **Character:** N/A **Quantity of urine:** N/A **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** N/A **Size:** N/A	The patient did not void during clinical rotation or time of assessment. Prior to assessment day, the client reports no pain or discharge with urination, but burn and urinary frequency. Possible UTI.
MUSCULOSKELETAL: **Neurovascular status:** Normal **ROM:** Active **Supportive devices:** Normal **Strength:** Decreased **ADL Assistance: Y☐ N ☐**	The client shows no signs of muscular atrophy in limbs. The client's arm muscle strength is rated at a 3/5 and their hip muscle strength is rated at a 3/5. The client is to remain on bedrest, but has bathroom privileges, 1 assist needed. Client has low fall risk with score of 3. Once discharged,

Fall Risk: Y ☐ N ☐ **Fall Score:** 3 (low fall risk) **Activity/Mobility Status:** 1 assist **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	client is advised to go back to using walker on their own.
NEUROLOGICAL: **MAEW:** Y ☐ N ☐ **PERLA:** Y ☐ N ☐ **Strength Equal:** Y ☐ N ☐ **if no - Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** Oriented x4 **Mental Status:** Alert and oriented x4 **Speech:** Unable to speak due to tracheostomy. **Sensory:** Intact **LOC:** None	The patient is alert and relaxed. Mrs. M is oriented x4; to person, place, time, and situation. The client is unable to speak due to tracheostomy, but their senses are intact. The client communicated via lip reading or whiteboard. Upon assessment, PERRLA b/l. The client's strength is equal throughout. The client performed pedal pushes and hand grips with ease.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** Medication and support from daughter **Developmental level:** Developmental level appropriate for age **Religion & what it means to pt.:** The patient did not disclose religious beliefs/practices **Personal/Family Data (Think about home environment, family structure, and available family support):** Support from family	The client is taking sertraline to treat major depression. The client is alert and oriented x4 (to person, place, time, and situation). Thought processes are coherent and memory is intact. Developmental level is appropriate for age. Support system from family, including daughter and son-in-law.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0825	87 bpm	124/56; L arm sitting	18	36.7°C oral	100% Optiflow – 30/30
1145	78 bpm	135/58; L arm sitting	18	36.7°C oral	100% Optiflow – 30/30

Vital Sign Trends: Vitals are stable at time of assessment

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0825	0 (nonverbal)	None	None	Nonverbal: grimacing	Pain management: acetaminophen
1145	0 (nonverbal)	None	None	Nonverbal: grimacing	Pain management: acetaminophen

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 G **Location of IV:** R-side chest **Date on IV:** 09/01/2022 **Patency of IV:** Intact **Signs of erythema, drainage, etc.:** None **IV dressing assessment:** Clean, dry, intact	Medication therapy

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
NPO diet 480 mL Irrigation flush volume: 276 mL Flush volume with medications: 60 mL TOTAL: 816 mL	None: Patient did not void during scheduled rotation.

Nursing Care

Summary of Care (2 points)

Overview of care: Thin mucous secretions and manage dyspnea caused by copious amounts of secretions.

Procedures/testing done: Tracheostomy care and suctioning.

Complaints/Issues: Copious amounts of secretions. Shortness of breath with dyspnea.

Vital signs (stable/unstable): Vital signs were stable at time of scheduled rotation and assessments.

Tolerating diet, activity, etc.: Patient was put on an NPO diet. The patient is self-sustained and can perform ADLs

Physician notifications: Sputum culture is positive for pseudomonas respiratory infection. Treat with antibiotics

Future plans for client: Increase activity as tolerated. Resume normal diet.

Discharge Planning (2 points)

Discharge location: The client will be going home with their husband.

Home health needs (if applicable): N/A

Equipment needs (if applicable): Wheelchair

Follow up plan: Levaquin at discharge since pan-sensitive pseudomonas. Hospital follow-up for infection, BP check (hypotensive), and tracheostomy. Follow up at pulmonology clinic for management of tracheostomy.

Education needs: Sterile technique with self-suctioning

Nursing Diagnosis (15 points) (Phelps, 2020)
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. Risk for infection related to surgical incision of tracheostomy as evidenced by tracheostomy placed on client.	The client is susceptible to invasion of pathogenic organisms, which may compromise the client's health.	**1.** Monitor the client's white blood cell count. **2.** Keep the stoma clean and dry. Use barrier creams or dressings around the tracheostomy and under its ties as needed.	The client will remain free of infection, as evidenced by normal temperature, negative sputum culture, normal WBC count, and clear breath sounds.	The client does not experience signs and symptoms of infection. The client's vital signs remain within normal limits. The clients WBC count within normal range. The client demonstrates understanding of signs and symptoms of infection and to report it.
2. Ineffective airway clearance related to copious secretions as evidenced by shortness of breath.	The client is at an increased risk for ineffective airway clearance due to the inability to clear secretions or obstructions from the respiratory tract to	**1.** Assess changes in blood pressure, heart rate, and temperature. **2.** Encourage the client to cough out secretions. If	The client will maintain a clear, open airway as evidenced by normal breath sounds, normal rate, and respirations, and the ability to	The client was compliant and cooperative. The client's airway remains clear and allows for adequate ventilation. The patient's oxygen level remains within normal range. The client doesn't experience dyspnea

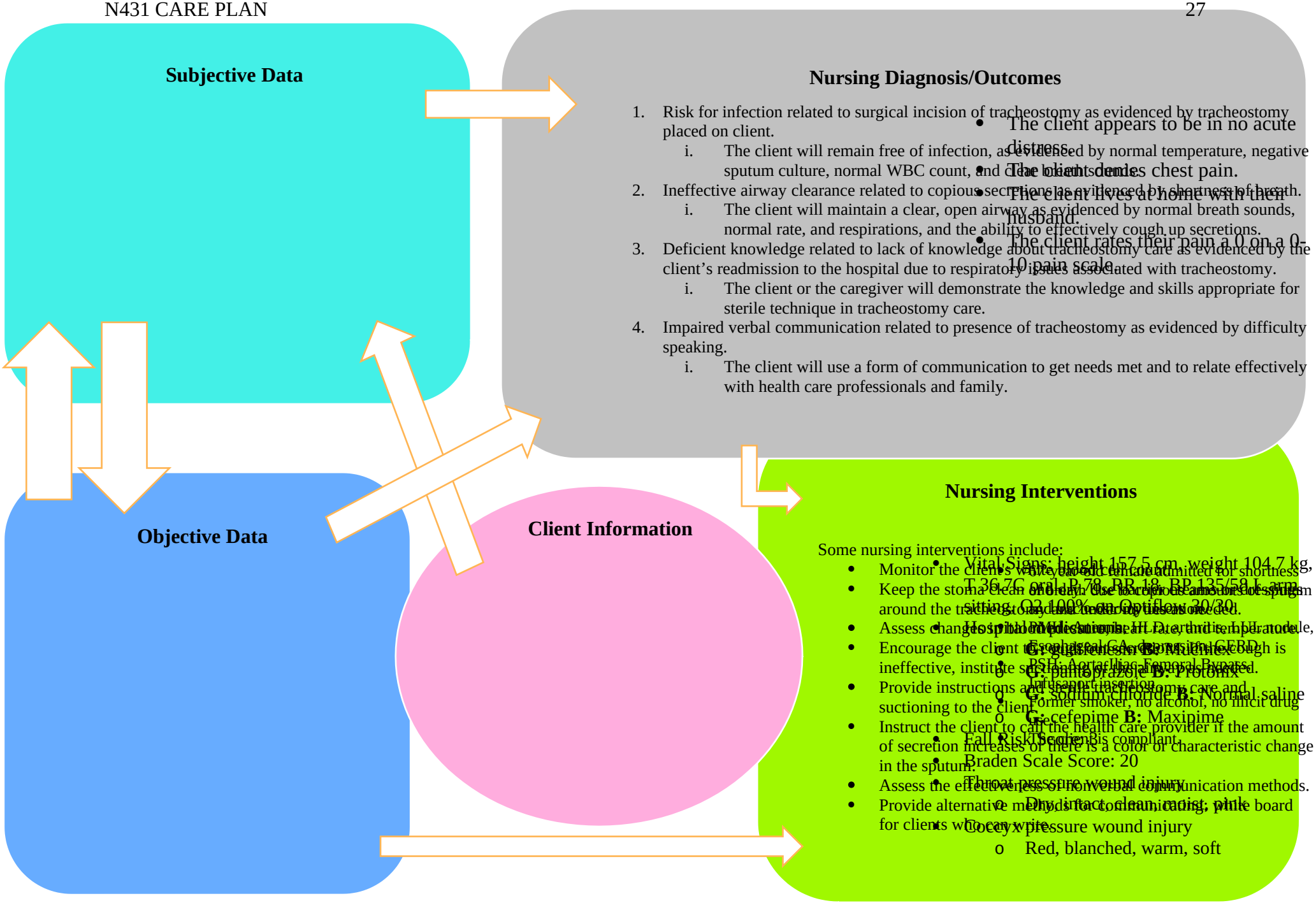
	maintain a clear airway.	the cough is ineffective, institute suctioning of the airway as needed.	effectively cough up secretions.	or change in respiratory pattern. The client demonstrates understanding of changes needed to diminish oxygen demands.
3. Deficient knowledge related to lack of knowledge about tracheostomy care as evidenced by the client's readmission to the hospital due to respiratory issues associated with tracheostomy.	The client may have insufficient information about tracheostomy care which can cause acute or long-term respiratory effects.	**1.** Provide instructions and sterile tracheostomy care and suctioning to the client. **2.** Instruct the client to call the health care provider if the amount of secretion increases or there is a color or characteristic change in the sputum.	The client or the caregiver will demonstrate the knowledge and skills appropriate for sterile technique in tracheostomy care.	The client stated understanding of all that has been learned. The client identifies specific changes in lifestyle that is needed to promote optimal health. The client demonstrates newly learned health related behaviors, such as sterile technique and tracheostomy care.
4. Impaired verbal communication related to presence of tracheostomy as evidenced by difficulty speaking.	The client is at a decreased delay or absent ability to receive, process, transmit thoughts and questions.	**1.** Assess the effectiveness of nonverbal communication methods. **2.** Provide alternative methods for communicating: white board for	The client will use a form of communication to get needs met and to relate effectively with health care professionals and family.	The client consistently communicates needs without frustration. The client successfully uses alternative means of communication (whiteboard). The client and family members communicate effectively.

		clients who can write.		

Other References (APA):

Phelps, L.L. (2020). *Sparks and Taylor's Nursing Diagnosis Reference Manual* (11th ed.). Wolters Kluwer.

Concept Map (20 Points): The concept map can be found on Page 27 of Care Plan.


Subjective Data
Nursing Diagnosis/Outcomes
1. Risk for infection related to surgical incision of tracheostomy as evidenced by tracheostomy placed on client.
i. The client will remain free of infection, as evidenced by normal temperature, negative sputum culture, normal WBC count, and clear breath sounds.
2. Ineffective airway clearance related to copious secretions as evidenced by shortness of breath.
i. The client will maintain a clear, open airway as evidenced by normal breath sounds, normal rate, and respirations, and the ability to effectively cough up secretions.
3. Deficient knowledge related to lack of knowledge about tracheostomy care as evidenced by the client's readmission to the hospital due to respiratory issues associated with tracheostomy.
i. The client or the caregiver will demonstrate the knowledge and skills appropriate for sterile technique in tracheostomy care.
4. Impaired verbal communication related to presence of tracheostomy as evidenced by difficulty speaking.
i. The client will use a form of communication to get needs met and to relate effectively with health care professionals and family.
• The client appears to be in no acute distress.
• The client denies chest pain.
• The client lives at home with their husband.
• The client rates their pain a 0 on a 0-10 pain scale.
Objective Data
Client Information
Nursing Interventions
Some nursing interventions include:
• Monitor the client's vital signs.
• Keep the stoma clean and dry. Use sterile technique to clean around the tracheostomy and dress as needed.
• Assess changes in breath sounds, rate, and temperature.
• Encourage the client to cough and deep breathe. If cough is ineffective, institute suctioning as needed.
• Provide instructions and demonstrate tracheostomy care and suctioning to the client.
• Instruct the client to call the health care provider if the amount of secretion increases or there is a color or characteristic change in the sputum.
• Assess the effectiveness of nonverbal communication methods.
• Provide alternative methods for communicating, white board for clients who can write.
Vital Signs: height 157.5 cm, weight 104.7 kg, T 36.7C oral, P 78, RR 18, BP 135/58 L arm sitting, O2 100% on Optiflow 30/30
Fall Risk Score: 8
Braden Scale Score: 20
Throat pressure wound injury
Dry, intact, clean, moist, pink
Coccyx pressure wound injury
Red, blanched, warm, soft
Vital Signs: height 157.5 cm, weight 104.7 kg, T 36.7C oral, P 78, RR 18, BP 135/58 L arm sitting, O2 100% on Optiflow 30/30
Fall Risk Score: 8
Braden Scale Score: 20
Throat pressure wound injury
Dry, intact, clean, moist, pink
Coccyx pressure wound injury
Red, blanched, warm, soft