N321 Care Plan #1

Lakeview College of Nursing

Beatriz Amaya

Demographics (3 points)

Date of Admission 9/29/22	**Client Initials** CM	**Age** 56	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Unemployed	**Marital Status** Married	**Allergies** Oxycodone-(causes tachycardia)
Code Status Full	**Height** 160 cm	**Weight** 96.4 kg	

Medical History (5 Points)

Past Medical History: Anxiety, Arthritis, Cardiovascular Arterial Disease, Gastroesophageal reflux disease, High Cholesterol, Hypertension, Obstructive Sleep Apnea, Acute low back pain, Hyperlipidemia, Depression, Obesity, Measles, Arthritis, Osteoarthritis, Knee pain,Chickenpox, Shoulder Injury

Past Surgical History: Stent (3/2022), Fistulectomy (2/24/2022), Colonoscopy (8/6/2021), , Knee Arthroscopy (9/22/20) , Shoulder arthroscopy, Cardiac catheterization, Hysterectomy (1965)

Family History:

Mom: Hypertension**,** Hyperlipidemia, Heart Attack

Father: Heart Disease

Brother: Cardiovascular disease, Heart Attack, Hyperlipidemia, Hypertension

Brother: Cardiovascular disease, Heart Attack

Aunt: Colon Cancer

Grandmother: Heart Attack

Grandfather: Heart Attack

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

The patient denies the use of tobacco, alcohol, and drugs.

Assistive Devices: The patient uses a walker and gait belt as assistive devices.

Living Situation: The patient lives with her spouse.

Education Level: Associates degree

Admission Assessment

Chief Complaint (2 points): Knee Pain

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

The patient states her knee pain caused by osteoarthritis started a few years ago. She could not give a specific time frame saying, "My osteoarthritis started several years ago." Therefore, she entered the surgery center by appointment for a bilateral knee replacement. The location being treated today was her knees. The duration of her pain lasts around eight to ten hours. When the patient has pain, she states it is constant and aching. What aggravates this would be standing up for several hours or strenuous activity. The patient states resting and taking naps alleviates her pain. The treatment she takes at home for pain is atorvastatin and ketorolac, and she is currently at the hospital. She states, "My pain is always there, but the pain medicine makes it bearable." The patient's current pain severity is rated an eight out of ten.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Osteoarthritis causing need of a bilateral Knee Arthroplasty

Secondary Diagnosis (if applicable):

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

Osteoarthritis is the most common arthritis there is to have. This patient had it on her, affecting her knees and needing a knee replacement. This disease is a slowly progressive degenerative and inflammation disease. According to Capriotti (2020, p.976), it is caused by excess pressure on a

joint gradually wearing away the cartilage surface, exposing the subchondral bone. In simple terms, there is a loss of cartilage in the bones, which is essential for your bones to be protected and maintained flexibly. As inflammation occurs and inflammatory mediators' cytokines and metalloproteases are released into the joint, the cartilage is degraded (Capriotti, 2020, p.972). The characteristics of people who usually get this disorder are obesity, which causes pressure on the knees and hips (Overbaugh, 2021, p.1,122). My patient has a medical history of obesity, which indicates osteoarthritis. It can affect the body, particularly joints in the knee and hand limiting their range of motion. According to Overbaugh (2021, p.1,123), joint stiffness, impaired mobility instability, limited range of motion, and crepitus heard with joint motion are signs of osteoarthritis. There are no expected findings of vital signs or lab-wise to this disease. An expected result in the nodes will hint to the patient having osteoarthritis. Typically, patients with osteoarthritis are expected to have Heberden's and Bouchard's. Capriotti (2020, p.977) states, "Heberden's nodes are swellings in the distal interphalangeal joints. Bouchard's nodes are swellings in the proximal interphalangeal joints." Diagnostic testing can be done for the disease "X-rays may show a narrowing of the joint space; osteophyte formation; and dense, thickened subchondral bone Capriotti (2020, p.978). There are no specific labs drawn or tests to help support the findings of osteoarthritis other than the criteria mentioned above.

Osteoarthritis can be treated in several different ways. According to Capriotti (2020), when the degeneration of the joints has become, severe total joint arthroplasty is done to remove the affected bone and replace it with a prosthetic appliance. In my client's case, she precisely had total knee arthroplasty done on both her knees as a treatment. There are also medications the patient can take to help alleviate the pain. According to Overbaugh (2021, p.1,123), other therapies include losing weight to decrease pressure on joints and assistive devices such as knee

braces, walkers, and canes. Pharmacological treatments include “Acetaminophen, NSAIDs, COX-2 inhibitors, glucosamine chondroitin, cortisone injections, hyaluronic acid injections, joint replacement” (Capriotti, 2020, p.972). This client takes aspirin, uses a walker, and has a joint replacement to treat her disease.

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

Overbaugh, Janice L. Hinkle, Kerry H. Cheever, K. (2021). Lippincott Course Point Enhanced for Brunner & Suddarth's Textbook of Medical-Surgical Nursing (15th ed.). Wolters Kluwer Health. https://fadavisreader.vitalsource.com/books/9781975186722

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.8-5.41 10^6/mcL	3.65 10^6/mcL	2.83 10^6/ mcL	My patient's red blood cells are low because she experienced some blood loss after surgery. According to Munoz et al. (2018), blood loss is common post-surgery, which is why blood transfusions are sometimes needed to bring the red blood cells back to normal. An order was placed to get more labs drawn in the afternoon to re-check her blood to ensure it had not dropped or if she would end up needing a blood transfusion..

Hgb	11.3-15.2g/dL	10.8 g/dL	8.6 g/dL	These values are both taken after surgery; the doctor explained to the patient that blood loss is common after surgery, so it is an expected outcome for Hgb to come back lower than within the normal range. According to Xe et al. (2020), total knee arthroplasty is usually associated with a significant decrease in hemoglobin.
Hct	33.2-45.3%	31.3%	24.2%	These values are both taken after surgery; the doctor explained to the patient that blood loss is common after surgery, so it is an expected outcome for Hgb to come back lower than within the normal range. According to Xe et al. (2020), total knee arthroplasty is usually associated with a significant decrease in hematocrit.
Platelets	149-393 K/mcL	156 K/mcL	172 K/mcL	**N/A**
WBC	4-11.7 K/mcL	11.9K/mcL	7.9 K/mcL	This lab was drawn after patients procedure. Surgery is an invasive procedure where infection is one of the top priorties to watch out for after so white blood count is monitored. According to Jung et al. (2019) white blood count can be elevated due to a developing infection in the early postoperative period, but it may as well be a normal surgical response.
Neutrophils	45.3-79%	85.9%	71.1%	These labs were drawn right after surgery, and the high level of neutrophils are inflammatory markers expected to see right after surgery since these people are more prone to infections as they just went through an invasive procedure (Inose, 2020). As labs were redrawn later, the levels returned to normal, indicating no infections.
Lymphocytes	11.48-45.9%	7.5%	18.2%	The patient just underwent surgery which would cause a low percentage of lymphocytes, and the neutrophil-lymphocyte ratio (NLR) is a simple

				biomarker for inflammation (Inose, 2020). As labs were redrawn later, the levels returned to normal, indicating no infections.
Monocytes	4.4-12%	6.4%	5.1%	**N/A**
Eosinophils	0.0-6.3%	N/A	4.5%	**N/A**
Bands	0 - 6.0%	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	Today's Value	Reason For Abnormal
Na-	136-145mmol/L	140 mmol/L	141 mmol/L	**N/A**
K+	3.5 - 5.1 mmol/L	3.9 mmol/L	3.9 mmol/L	**N/A**
Cl-	98 - 107 mmol/L	106 mmol/L	107mmol/L	**N/A**
CO2	21 - 31 mmol/L	24 mmol/L	N/A	**N/A**
Glucose	74 - 109 mg/dL	140 mg/dL	111 mg/dL	This patient has a history of obesity, high cholesterol, and hyperlipidemia, which can affect her glucose reading. Her past medical history indicates poor lifestyle habits contributing to high blood glucose levels. According to Hao (2017), obesity and high triglyceride levels are correlated to high glucose readings.
BUN	7 - 25 mg/dL	15 mg/dL	16 mg/dL	**N/A**
Creatinine	0.60 - 1.30 mg/dL	.60 mg/dL	.62 mg/dL	**N/A**
Albumin	3.5 - 5.2 g/dL	**N/A**	**N/A**	**N/A**
Calcium	8.6-10.3 mg/dL	2.8 mg/dL	2.4 mg/dL	Calcium is directly linked to bond density, so a low calcium level indicates low bone mass density. Her diet is severely lacking

				calcium. This patient has a history of gastroesophageal reflux disease, and according to Bychkov & Yakhnitska (2018), patients with GERD statically have lower calcium values.
Mag	1.6 - 2.4 mg/dL	**N/A**	**N/A**	**N/A**
Phosphate	2.5 - 5.0 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 nits/L	**N/A**	**N/A**	**N/A**
AST	13- 39 units/L	**N/A**	**N/A**	**N/A**
ALT	7 - 52 units/L	**N/A**	**N/A**	**N/A**
Amylase	29- 103	**N/A**	**N/A**	**N/A**
Lipase	11- 82 units/L	**N/A**	**N/A**	**N/A**
Lactic Acid	< 2.5	**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	Today's Value	Reason for Abnormal
INR	0.86- 1.4	**N/A**	**N/A**	**N/A**
PT	11.9- 15 seconds	**N/A**	**N/A**	**N/A**
PTT	22.6 - 35.3 seconds	**N/A**	**N/A**	**N/A**
D-Dimer	0.00 - 0.62 ng/mL	**N/A**	**N/A**	**N/A**
BNP	0-100 ng/L	**N/A**	**N/A**	**N/A**

HDL	23-92 mg/dL	**N/A**	**N/A**	**N/A**
LDL	75 -193 mg/dL	**N/A**	**N/A**	**N/A**
Cholesterol	<199 mg/dL	**N/A**	**N/A**	**N/A**
Triglycerides	<150 mg/dL	**N/A**	**N/A**	**N/A**
Hgb A1c	<5.7%	**N/A**	**N/A**	**N/A**
TSH	0. 45 -5.33 mU/L	**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	Today's Value	Reason for Abnormal
Color & Clarity	yellow and clear	**N/A**	**N/A**	**N/A**
pH	5.0 -8.0	**N/A**	**N/A**	**N/A**
Specific Gravity	1.005 - 1.034 kg/m3	**N/A**	**N/A**	**N/A**
Glucose	negative	negative	**N/A**	**N/A**
Protein	negative	**N/A**	**N/A**	**N/A**
Ketones	negative	**N/A**	**N/A**	**N/A**
WBC	4.0 -11.7 cells/µL	**N/A**	**N/A**	**N/A**
RBC	4.28 - 5.56 million/mm3	**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	Today's Value	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):

Bychkov, M. A., & Yakhnitska, M. M. (2018). *Wiadomosci lekarskie (Warsaw, Poland : 1960)*, *71*(3 pt 1), 561–563.

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

Hao, G., Wang, D., Sun, Y., Yu, J., Lin, F., & Cao, H. (2017). Association of blood glucose and lipid levels with complete blood count indices to establish a regression model. *Biomedical Reports*, *6*(3), 339–345. https://doi.org/10.3892/br.2017.852

Inose H, Kobayashi Y, Yuasa M, Hirai T, Yoshii T, Okawa A. Postoperative lymphocyte percentage and neutrophil–lymphocyte ratio are useful markers for the early prediction of surgical site infection in spinal decompression surgery. *Journal of Orthopaedic Surgery. 2020;28*(2). doi:10.1177/2309499020918402

Jung, G. H., Hwang, H. K., Lee, W. J., & Kang, C. M. (2019). Extremely high white blood cell counts on postoperative day 1 do not predict severe complications following distal pancreatectomy. *Annals of Hepato-Biliary-Pancreatic Surgery*, *23*(4), 377–384. https://doi.org/10.14701/ahbps.2019.23.4.377

Ke, C., Tian, N., Zhang, X., & Chen, M. (2020). Changes in perioperative hemoglobin and hematocrit in patients undergoing total knee arthroplasty: a prospective observational study of optimal timing of

measurement. *The Journal of International Medical Research*, *48*(11), 300060520969303. https://doi.org/10.1177/0300060520969303

Muñoz, M., Franchini, M., & Liumbruno, G. M. (2018). The post-operative management of anemia: more efforts are needed. *Blood transfusion*, *16*(4), 324–325. https://doi.org/10.2450/2018.0036-18

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

The patient has an X-Ray bilateral view for a post-op hardware evaluation. It showed no acute fractures or malalignment. Soft tissue emphysema presents as expected, overlying the left and right knee. The impression is that the left and right knee arthroplasty are both intact. After a total knee replacement/arthroplasty, it is crucial to get an X-ray. According to Aljawder (2018), it is essential to be obtaining an X-ray after total knee arthroplasty; it is the standard of care in a healthcare institution. Furthermore, the purpose is to "provide instant feedback regarding fractures, implant orientation, dislocation and retained drains of the knee" (Aljawder, 2018). The aim of this is to identify complications and technical flaws that would require immediate intervention.

Diagnostic Test Correlation (5 points):

In this case, my patient had an X-ray after having a total knee arthroplasty. It correlates to the chief complaint of knee pain that led to her surgery on both knees. This X-ray is needed to indicate proper alignment after the procedure and identify any flaws that might require immediate intervention.

Diagnostic Test Reference (1) (APA):

Aljawder, A., Alomran, D., Alayyoub, M., & Alkhalifa, F. (2018). Immediate postoperative portable radiograph after total knee replacements: A necessity or a burden?. *The Open Orthopedics Journal*, *12*, 173–179. https://doi.org/10.2174/1874325001812010173

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

Home Medications (5 required)

Brand/ Generic	Compro/ Prochlorperazine	Lipitor/ Atorvastatin	**Amrix/ Cyclobenzaprine**	**Pepcid/ Famotidine**	**Ultram/ Tramadol**
Dose	5 mg	40 mg	10 mg	10 mg	50 mg
Frequency	PRN	Daily	PRN, HS	Daily	PRN
Route	PO	PO	PO	PO	PO
Classification	Pharmacological: Piperaze phenothiazine Therapeutic: antiemetic	Pharmacological: HMG-CoA reductase inhibitor Therapeutic: Antihyperlipidemic	Pharmacological: Tricyclic antidepressant like agent Therapeutic: Skeletal muscle relaxant	Pharmacological: Histamine-2 blocker Therapeutic: anti-ulcer agent	Pharmacological: Opioid agonist Therapeutic: Opioid analgesic

Mechanism of Action	"Alleviates nausea and vomiting by centrally blocking dopamine receptors in the medullary chemoreceptor trigger zone and by peripherally blocking the vagus nerve in the GI tract" (Jones, 2021, p.901). "Alleviate psychotic symptoms by blocking dopamine receptors depressing release of selected hormones and producing alpha androgenic blocking effect in the brain" (Jones, 2021, p.901).	"Reduces plasma cholesterol and lipid protein 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 LDL uptake and breakdown" (Jones 2021, p.96).	Acts in the brain stem to reduce or abolish tonic muscle hyperactivity. (Jones 2021, p.269). Relieves muscle spasms without disrupting function (Jones 2021, p.269).	"Reduces HCI formation by preventing histamine from binding with H_2 receptors on the surface of parietal cells" (Jones, 2021, p.442). Helps prevent peptic ulcers from forming and helps heal existing ones (Jones, 2021, p.442).	"Binds with mu receptors and inhibits the reuptake of norepinephrine and serotonin" (Jones, 2021, p.1091)
Reason Client Taking	This patient specifically takes it for her nausea and headaches but can also help with her anxiety.	The patient has a medical history of high cholesterol takes it to lower her high cholesterol levels as needed.	Muscle Relaxant for the patients' spasms.	Patient uses it to treat her gastroesophageal reflux disease.	This patient takes it for severe pain needs.
Contraindications (2)	Hypersensitivity to	Hypersensitivity to	Hypersensitivity to	Hypersensitivity	Hypersensitivity to

	prochlorperazine, severe CNS (Jones, 2021, p.901)	atorvastatin, active hepatic disease (Jones 2021, p.96).	cyclobenzaprine, arrhythmias (Jones 2021, p.269).	famotidine, hypersensitivity to other H_2 receptors (Jones, 2021, p.443).	tramadol, significant respiratory depression (Jones, 2021, p.1091).
Side Effects/Adverse Reactions (2)	Dizziness, drowsiness (Jones, 2021, p.901)	Weakness, thrombocytopenia (Jones 2021, p.96).	Anxiety, heart block, leukopenia (Jones 2021, p.269).	Fatigue, dizziness, depression (Jones, 2021, p.443).	Dizziness, respiratory depression (Jones, 2021, p.1092).
Nursing Considerations (2)	"Urge patient to avoid hazardous activities because of the risk of drowsiness and impaired judgment and coordination" (Jones, 2021, p. 902). "Instruct patient to avoid excessive sun exposure and to wear sunscreen outdoors" (Jones, 2021, p. 902).	"Atorvastatin used in patients with homozygous familial hypercholesterolemia as an adjunct to other lipid lowering treatments" (Jones 2021, p.97). "Expect liver function tests to be performed before atorvastatin therapy start and then after as it is clinically necessary" (Jones 2021, p.97).	Use medication in caution with patience history of low seizure threshold (Jones 2021, p.270). Take safety precautions to prevent falls if patient is dizzy or weak (Jones 2021, p.270).	Shake oral suspension vigorously for five to 10 seconds before administration, Keep at room temperature (36 ° C) protect from freezing (Jones, 2021, p.443).	"Excessive use of tramadol may lead to abuse addiction misuse overdose and possible death" (Jones, 2021, p.1092). "Use tramadol cautiously in patients who are taking depressant drugs" (Jones, 2021, p.1092).

Hospital Medications (5 required)

Brand/ Generic	Tylenol/ Acetaminophen	Norco / Hydrocodone-Acetaminophen	Zetia/ Ezetimibe	Plavix/ Clopidogrel	Toradol/ Ketorolac
Dose	650 mg	5 mg	10 mg	10 mg	15 mg
Frequency	Q6	Q4	Daily	Daily	Q6 (for five days starting only 9/29/22)
Route	PO	**PO**	**PO**	**PO**	IV push
Classification	Pharmacological: Non-salicylate, paraminophenol derivative Therapeutic: Antipyretic, nonopioid analgesic	Pharmacological: Opioid Therapeutic: Opioid analgesic	Pharmacological: cholesterol absorption inhibitor Therapeutic: Antilipemic	Pharmacological: P2Y platelet inhibitor Therapeutic: Platelet aggregation inhibitor	Pharmalogical: NSAID Therapeutic: analgesic
Mechanism of Action	"Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous syndrome" (Jones,2021, p.9).	"Binds to and activates opioid receptors at sites in the periaqueductal and pre ventricular grey matter the ventromedial medulla and the spinal cord prejudice pain relief" (Jones 2021, p.540).	"Reduces blood cholesterol by inhibiting its absorption through the small intestine" (Jones, 2021, p. 439).	"Binds to adenosine diphosphate receptors on the surface of activated platelets" (Jones, 2021, p. 250).	"Blocks cyclooxygenase and enzyme needed to synthesize prostaglandins mediate inflammatory response and cause local rates of dilation pain and swelling, reduces inflammation and relieves pain" (Jones, 2021, p. 609).
Reason Client Taking	Patient takes it in case of a fever or mild pain.	The patient takes it for severe pain due to her bilateral knee surgery.	Patient takes it for her medical history of	Patient takes it due to her family's extensive	Patients takes it for severe pain due to her surgery procedure.

			high cholesterol.	heart health history and her having a history of cardiovascular arterial disease to prevent clots from forming that could cause a heart attack.	
Contraindications (2)	Hypersensitivity to acetaminophen, severe hepatic impairment (Jones, 2021, p.9).	Hypersensitivity to hydrocodone, significant respiratory depression (Jones, 2021, p.540).	hypersensitivity to ezetimibe, hypersensitivity to its components (Jones, 2021, p. 439).	Hypersensitivity to clopidogrel, Active pathological bleeding such as peptic ulcer disease or intracranial hemorrhage (Jones, 2021, p. 251).	High risk of bleeding, hypersensitivity to ketorolac
Side Effects/Adverse Reactions (2)	Hypertension, Muscle spasms (Jones, 2021, p.9).	Depression, respiratory depression (Jones, 2021, p.541).	Fatigue, dizziness (Jones, 2021, p. 439).	Fatigue, dizziness, fatal intracranial bleeding (Jones, 2021, p. 251).	Leukopenia, sepsis (Jones, 2021, p. 610).
Nursing Considerations (2)	Tablets may be crushed or swallowed whole, exceeding recommended dose puts client at risk for liver damage (Jones, 2021, p.10).	Increased risk of abuse addiction and misuse, know that benefits of hydrocodone therapy outweigh the risks a risk evaluation and	"Monitor liver enzymes before and during ezetimibe therapy as ordered"	Risk of bleeding from surgery or trauma, watch out for conditions that predispose	Risk of heart failure is increased, give I.V. injection over at least 15 seconds (Jones, 2021, p. 610).

		mitigation strategy is required (Jones, 2021, p.542).	(Jones, 2021, p. 440). "Direct patient to follow a low cholesterol diet as an adjunct to ezetimibe therapy" (Jones, 2021, p. 440).	to bleeding such as peptic ulcer disease or thrombotic (Jones, 2021, p. 251).	

Medications Reference (1) (APA):

Jones, D.W. (2021). *Nurse's drug handbook*. (A. Bartlett, Ed.) (19th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient was alert and oriented to person, place, time, and situation. Alert and Oriented times four. (A&O x4) The patient responds to verbal stimuli. The patient showed no signs of distress at the time. Overall physical hygiene is well cared for and maintained.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 20** **Drains present: Y☐ N ☒** **Type:**	The patient's skin color is an even tone and fair white color throughout the skin. Skin is moist and warm to the touch. Skin turgor is loose, with no lesions, bruises, or wounds. Skin does have an incision at the knees due to bilateral knee arthroplasty. Patient Braden's score is 20. No drains are present.

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	The patient's head is normocephalic and symmetrical. Ears are symmetrical with no serum or epistaxis. The patient's eye represented PERLA. The nose showed no polyps nor deviated septum. The patient teeth are intact, and self-care hygiene was provided during the visit. .
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:**	**Patients' heart sounds S1 and S2 were auscultated. No present murmurs were heard. Cardiac rhythm was not assessed. Peripheral pulses pulse slightly diminished, demonstrating a rating of 2+. Capillary refill less than three seconds. No neck vein distention and no edema present.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	No accessory muscles were used. The patient's breath sounds were auscultated anterior and posterior sounding regular, clear, and diminished. Lung aeration is equal bilaterally.
GASTROINTESTINAL: **Diet at home: Regular** **Current Diet: Regular** **Height: 160 cm.** **Weight:96.4kg** **Auscultation Bowel sounds:** **Last BM: 9/28-Miralax** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions: Knees Bilaterally (Silver mepilex)** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	The patient's diet at home is regular with the current diet. Patient's height 160 centimeters and a weight of 96.4 kilograms. Bowel sounds were active in all four quadrants. Last bowel movement 9/29/2022 Miralax was given at medication administration pass time due to several days of not having a bowel movement. Upon palpation of abdomen no pain or masses present. No distension, scars or drains are present. The patient has an incision on both her knees due to her recent total knee arthroplasty. The patient has a silver mepilex covering the incision site to prevent bacteria from going into the incision site. The patient does not have an ostomy or nasogastric tube. No feeding tubes either.

GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	The patient's urine was yellow and clear. The quantity of urine was adequate voided once throughout the morning—no pain with urination. No dialysis. Inspection of genitals, not examined. The patient does not have a catheter.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 70** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	The patient's neurovascular status is intact. Active range of motion present and demonstrated. The patient uses a walker as a support device. The patient showed 4+ strength in the upper extremities. The patient showed 3+ strength in their lower extremities and some weakness due to recent knee surgery. The patient's fall score was 70 (high risk). Mobility status patient requires one personal assistance for completion of activity of daily living. The patient does need help with the use and set up of equipment. The patient also needs additional support to stand and walk as she is recovering from surgery and slowly regaining her strength.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient can move all extremities well, with weakness in the legs. Eyes were examined and exhibited PERLA. The patient has equal strength of 4+ for the upper extremities. Patient presents equal strength for lower extremities 3+. The patient is alert and oriented times four (A&Ox4). Mental status is alert with no impaired cognition. Speech is clear, with no delays or difficulties present. The patient is able to make her needs known. The patient sensory is intact. The patient is alert, awake, and able to answer all questions asked adequately with no loss of consciousness.
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):**	The patient's coping mechanism is talking on the phone with her loved ones and reading to distract her for a little bit. The patient can read and write. She can form well-structured sentences as well as easily make her needs known. The patient expresses she is not religious by any means. She has a loving environment at

	home as she lives with her spouse, who takes care of her. There are close relatives to care for her when needed.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
07:30	**96 bpm**	**114/69 mm Hg**	**18**	36.6℃	**96% RA**
09:00	**98 bpm**	**103/72 mm Hg**	**18**	36.8℃	**96% RA**

Pain Assessment, 2 sets (2 points) Numeric Pain Scale:

Time	Scale	Location	Severity	Characteristics	Interventions
07:30	**0-10**	**Knees**	**5/10**	"Sharp, stabbing and aching"	Patients' legs repositioned and elevated with pillows. Patient ambulated to and from bathroom door to keep from having activity intolerance as well.
09:00	0-10	Knees	8/10	"Sharp, stabbing and aching"	Asked the nurse for pain medication available as well as ambulated to the chair and propped her legs up.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: The patient only had a peripherally inserted central catheter (PICC line) :40 cm 5 French dual-lumen PICC **Location of IV: Right upper arm** **Date on IV:9/29/22** **Patency of IV:PICC is heparin locked, no signs of irritation, redness, or swelling.** **Signs of erythema, drainage, etc.: No signs of swelling, erythema, drainage, or tenderness present.** **IV dressing assessment: Dressing is clean, dry and intact.**	PICC is Heparin locked with no fluids.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
240 mL (Coffee)	Voided 1x (Urine)

Nursing Care

Summary of Care (2 points)

Overview of care: The patient had a bilateral knee arthroplasty done on 9/29/22. The patient's hemoglobin came back at 8.6 g/dL, which previous one was 10.8 g/dL. The patient's hemoglobin will be rechecked before being discharged. The patient's plan of care was discussed in the room with the doctor as she did express wanting to go home and showed efforts today to ambulate and show progress. The patient was given scheduled Toradol (ketorolac) due to pain being unrelieved after interventions (sitting in the chair and elevating her legs) were attempted to

help her pain. The patient is resting at the time, as she expressed being tired after ambulating and feeling dizzy.

Procedures/testing done: Bilateral total knee arthroplasty, X-ray of knees bilaterally

Complaints/Issues: "My pain is at an 8/10" "It feels like it is a sharp, constant, and stabbing pain" "I feel dizzy"

Vital signs (stable/unstable): Vital signs stable

Tolerating diet, activity, etc.: The patient voided once throughout the morning and ate about fifty percent of her food before she started feeling dizzy. The patient ambulated in her room three times during the morning using her walker and sat up in the chair for a couple of minutes before returning to bed. The patient did not leave the unit.No diagnostics or labs were to be drawn until the afternoon to redraw her hemoglobin. I notified the nurse about the patient's pain level and dizziness.

Physician notifications: The physician was notified about hemoglobin coming back at 8.6 g/dL. The physician ordered a re-check later throughout the day before discharge. The physician was aware of the patient's efforts in ambulating and showing progress in wanting to go home.

Future plans for the client: It is anticipated the client will require home health upon discharge. The patient has an appointment to follow up with Rebrewed on the twelfth of October.

Discharge Planning (2 points)

Discharge location: The patient will go home with their spouse if she shows an effort to ambulate. The patient will go home with Sarah bush home health services.

Home health needs (if applicable): The patient will go home with home health with a walker.

Equipment needs (if applicable): The patient will need a walker to go home with.

Follow-up plan: The patient has an appointment to follow up with Rebrewed on the twelfth of October

Education needs: The patient needs education on the importance of staying active and ambulating as much as possible or as tolerated. As well as taking proper care of the incision site and checking for infections.

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. At risk for infection related to bilateral knee surgery as evidenced by elevated white blood count and neutrophils post-surgery.	This rationale was chosen due to the patient's recent surgical procedure. Any time the skin is opened, it is susceptible to catching any germs or bacteria causing an infection.	1. Assessing the site and surroundings of the incision, ensuring the dressing is not saturated and changed as needed, and checking for any symptoms of infection such as redness, swelling, and	1. Patient will remain free of infection upon stay at the hospital and follow-up appointment with Dr.Brewer without symptom	The client and family responded with interventions and understanding why silver mepilex is in place. The client has reached her goal of staying infection free at the hospital with nurses practicing hand hygiene and proper care for the site. The patient appropriately

		warmth. 2. Patient will have a silver mepilex placed on both knees to shield the incision from infections and help kill bacteria.	s of illness or disease at the surgery incision site.	assesses the surgical incision site and checks for infections. The only modification would be for the patient herself to teach back to the nurse what safe practices are to keep from getting infections once the patient is discharged.
2. At risk for injury related to patient impaired mobility as evidenced by falls score of seventy and need of use of a walker.	This nursing diagnosis was chosen due to patient's recent surgery and added assistance needed to ambulate. As well as fall score being seventy. As well as patient being on blood thinners (clopidogrel) could cause a lethal injury if fall would occur she is at risk for internal bleeding.	1. Make sure safety precautions are in place like a fall risk band on, the bed is locked in a low position, the bed alarm is on, and the call light is in reach. 2.Assisting patient when help is needed and hourly rounding asking if there is a need to void to prevent falls.	1. The patient will be free of falls during hospital stay and adequatel y checked on to prevent falls.	The patient and family understood the importance of the patient not getting up on her own and asking for assistance when needed. The client's response was adequate and pleasant, as she understood this was for her safety. The goal was reached with safety precautions and hourly rounding, asking if there was a need to void. No modifications are needed at the time as all the protection in place has been adequate to keep her safe. The patient has remained free of falls.
3. At risk for activity intolerance	This nursing diagnosis was chosen because	1)Educating the importance of motivating	1. The goal is for the	The client responded well; she realized

related to patient's knee pain as evidenced by doctors stating she has not tried to walk since surgery.	the prior nurses and doctors discussed the patient's little to no efforts to ambulate being a problem that could prevent her from returning home and needing to go to a rehabilitation center. The patient would fail to walk with therapy due to her pain. The doctors had to have an assertive talk with her willingness to try to get strength and ability to get around and walk safely to go home.	herself and setting goals to be active. 2)Physical therapy trying to encourage her to get her steps in for the day and ambulate twice a day.	patient to understand the importance of ambulating after having surgery. Physical therapy or licensed staff to help her ambulate at least twice a day as tolerated with little to no complications.	she did not want to go to a rehab center and how much she wanted to go home. The client was upset to hear if she did not put effort into ambulating, she would go to rehab, so she decided to start trying to ambulate. The patient ambulated three times from her bed to the bathroom to, even tolerating sitting up in the chair for a couple of minutes. The goal was reached, although I believe the only modification, I would make is increasing the walks to the hallway instead of just the room.

Other References (APA): N/A

Concept Map (20 Points):

Subjective Data:

My osteoarthritis started several years ago"

"My pain is at an 8/10"

"It feels like it is a sharp, constant, and stabbing pain"

"My pain is always there but the pain medicine makes it bearable."

"I feel dizzy"

Objective Data:

Vitals:

	HR.	B/P	Resp.	Temp.	Oxygen%
07:30	**96 bpm**	**114/69 mm HG**	**18**	36.6 ℃	**96% RA**
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Patients most recent hemoglobin of 8.6 g/dL previous hemoglobin was at 10.8 g/dL. Patients white blood count after surgery 11.9% but re check was at 7.9%. Patients hematocrit level is at 24.2%. After surgery low red blood cells at 3.65 10^6/mcl and todays value at 2.83 10^6/mcL.

Client Information

The patient is a fifty-six-year-old with a history of obesity, arthritis, osteoarthritis, high cholesterol, hyperlipidemia, and knee pain. The patient presents to the surgery center for bilateral knee arthroplasty due to her knee pain caused by osteoarthritis.

Nursing Diagnosis/Outcomes

1)At risk for infection related to bilateral knee surgery as evidenced by elevated white blood count and neutrophils post-surgery.

Outcome:Patient will remain free of infection upon stay at the hospital and follow-up appointment with Dr.Brewer without symptoms of illness or disease at the surgery incision site.

2) At risk for injury related to patient impaired mobility as evidenced by falls score of seventy and need of use of a

Outcome: The patient and family understood the importance of the patient not getting up on her own and asking for assistance when needed. The client's response was adequate and pleasant, as she understood this was for her safety. The goal was reached with safety precautions and hourly rounding, asking if there was a need to void. No modifications are needed at the time as all the protection in place has been effective in keeping her safe. The patient has remained free of falls.

3) At risk for activity intolerance related to the patient's knee pain, as evidenced by doctors stating she has not tried to walk since surgery.

Outcome. The client responded well. She realized she did not want to go to a rehab center and how much she wanted to go home. The client was upset to hear if she did not put effort into ambulating, she would go to rehab, so she decided to start trying to ambulate. She ambulated from her bed to the bathroom three times during my stay. The patient tolerated sitting in the chair for a couple of minutes. The goal was reached, although I believe the only modification, I would make is increasing the walks to the hallway instead.

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Nursing Interventions:

1. Assessing the site and surroundings of the incision, ensuring the dressing is not saturated and changed as needed, and checking for any symptoms of infection such as redness, swelling, and warmth.

2. Patient will have a silver mepilex placed on both knees to shield the incision from infections and help kill bacteria.

1.Make sure safety precautions are in place, like a fall risk band on, the bed is locked in a low position, the bed alarm is on, and the call light is within reach.

2. Assisting patients when help is needed and hourly rounding asking if there is a need to void to prevent falls.

1)Educating the importance of motivating herself and setting goals to be active.

2)Physical therapy is trying to encourage her to get her steps in for the day and ambulate twice a day.