N311 Care Plan 2

Lakeview College of Nursing

Angel Roby

Demographics (5 points)

Date of Admission	Patient Initials	Age	Gender
10/11/2021	M.K.C.	66 years old	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Non-Hispanic	Retired	Married	Penicillin (Swelling throat) Azithromycin (Hives) Sulfa drugs (Hives)
Code Status	**Height**	**Weight**	
Full code	167.6 cm (5'6")	61.3 kg (135 lbs.)	

Medical History (5 Points)

Past Medical History:

Insomnia, migraine, osteoporosis, hypertension, hypothyroid, hyperlipidemia, depressive disorder, chronic anxiety (Dates are not present when diagnosed).

Past Surgical History:

Thyroidectomy (2001) – Reason: Hypothyroidism

Cholecystectomy (1990) – Reason: Unknown

Knee (09/01/2020) and (01/01/2020) – Reason: Osteoporosis

Cesarean section (07/23/1979) and (07/26/1984) – Reason: Risky birth

Arthroplasty (10/11/2021) – Reason: Failed knee replacement

Family History:

COPD (Father), Diabetes (Father), Heart attack and heart disease (Father) – Deceased

Social History (tobacco/alcohol/drugs):

Patient uses tobacco, 1 pack a day. Patient does not use any alcohol or drugs.

Admission Assessment

Chief Complaint (2 points): Failed knee replacement (Left knee)

History of present Illness (10 points):

The patient's knee replacement failed, due to complications when she had her knee surgery in September of last year (09/01/2020). The patient had to come back to Sarah Bush Lincoln Hospital this October (10/11/2021) to undergo another knee replacement surgery to fix it. Upon assessment patient describes that after the recent knee replacement surgery, her pain on a scale of 0 – 10 is an 8. The pain started after the surgery on her left knee and describes the pain as throbbing. The pain comes and goes, nothing relieves it besides the pain medication that is prescribed to her in the hospital. The patient needs assisting with a gait belt and walker for her mobility.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Failed knee replacement

Secondary Diagnosis (if applicable): N/A

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

The knee is one of the largest and most complex joints in the body. The knee joins the thigh bone (femur) to the shin bone (tibia). The smaller bone that runs

alongside the tibia (fibula) and the kneecap (patella) are the other bones that make the knee joint. Surgery may be done to correct a variety of knee conditions. Surgery can replace or repair a torn ligament, remove an injured meniscus, or entirely replace a severely damaged knee. Surgery may be done with a large incision (open) or smaller incisions (arthroscopic) (Capriotti, 2020). The primary causes of failure of total knee arthroplasty are pain, postoperative stiffness, and instability. Pain associated with weight bearing is most often mechanical and is caused by loosening, component failure, or patellar dysfunction (Capriotti, 2020).

Osteoporosis causes bones to become weak and brittle — so brittle that a fall or even mild stresses such as bending over, or coughing can cause a fracture. Osteoporosis-related fractures most commonly occur in the hip, wrist, or spine (Capriotti, 2020). Osteoporosis from inactivity can weaken bones to the point of pathological fracture. A pathological fracture is a break in the bone's integrity caused by extreme stress from a nontraumatic etiology. The bone is internally weakened by a pre-existing condition and fractures easily without trauma or with only slight trauma. Osteoporosis, neoplasms or cancerous tumors within bone, and metabolic conditions that internally weaken bones can cause pathological fracture (Capriotti, 2020). Risk factors for osteoporosis include your sex, women are much more likely to develop osteoporosis than men, your age, the older you get the greater the risk, your race, family history, and body frame. Signs and symptoms of osteoporosis include loss of height, change in posture, shortness of breath, bone fractures and pain in the lower back (Capriotti, 2020).

Physical activity stimulates increases in bone diameter and strength throughout the life span. Exercise-stimulated bone strengthening, and remodeling diminish the risk of fracture by counteracting the development of osteoporosis (Capriotti, 2020).

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

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

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	**3.9 – 4.98**	**N/A**	**N/A**	**N/A**
Hgb	**12.0 – 15.5**	**N/A**	**11.3**	**Low hemoglobin levels due to patient having hypothyroidism**

				which causes the body to produce fewer red blood cells than normal. (Bladh, Leeuwen, 2015)
Hct	**35 – 45**	**N/A**	**33.9**	**Low hematocrit levels due to patient having vitamin and mineral deficiencies (Bladh, Leeuwen, 2015)**
Platelets	**140 – 400**	**N/A**	**N/A**	**N/A**
WBC	**4.0 – 9.0**	**N/A**	**N/A**	**N/A**
Neutrophils	**2.4 – 8.4**	**N/A**	**N/A**	**N/A**
Lymphocytes	**0.8 – 3.7**	**N/A**	**N/A**	**N/A**
Monocytes	**4.4 – 12**	**N/A**	**N/A**	**N/A**
Eosinophils	**0 – 6.3**	**N/A**	**N/A**	**N/A**
Bands	**10 – 16 (%)**	**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-	**135 – 145**	**N/A**	**138**	**N/A**
K+	**3.5 – 5.1**	**N/A**	**5.3**	**High potassium level in patient due to patient having COPD which causes hyperkalemia. (Bladh, Leeuwen, 2015)**
Cl-	**98 – 107**	**N/A**	**102**	**N/A**
CO2	**22 – 29**	**N/A**	**27**	**N/A**
Glucose	**70 – 99**	**N/A**	**127**	**High glucose level in patient due to patient having hyperlipidemia, patient consumes more added sugars which causes HDL levels to decrease. (Bladh, Leeuwen, 2015)**
BUN	**6 – 20**	**N/A**	**8**	**N/A**
Creatinine	**0.50 – 1.00**	**N/A**	**0.64**	**N/A**

Albumin	**3.5 – 5.2**	**N/A**	**N/A**	**N/A**
Calcium	**8.4 – 10.5**	**N/A**	**9.1**	**N/A**
Mag	**1.7 – 2.2**	**N/A**	**N/A**	**N/A**
Phosphate	**2.4 – 4.5**	**N/A**	**N/A**	**N/A**
Bilirubin	**0.0 – 1.2**	**N/A**	**N/A**	**N/A**
Alk Phos	**35 – 105**	**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, clear**	**N/A**	**N/A**	**N/A**
pH	**5.0 – 9.0**	**N/A**	**N/A**	**N/A**
Specific Gravity	**1.005 – 1.025**	**N/A**	**N/A**	**N/A**
Glucose	**Negative**	**N/A**	**N/A**	**N/A**
Protein	**Negative**	**N/A**	**N/A**	**N/A**
Ketones	**Negative (none)**	**N/A**	**N/A**	**N/A**
WBC	**0 – 0.5**	**N/A**	**N/A**	**N/A**
RBC	**0 – 3.0**	**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	**10,000 colonies/mL**	**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 (APA):

Bladh, M.B., & Leeuwen, A.L. (2015). ***Comprehensive handbook of laboratory & diagnostic tests with nursing implications*** **(6th ed.). FA. Davis Company.**

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Electrocardiogram (6/29/2021) – Patient exhibited signs and symptoms of COPD such as shortness of breath, fatigue, and wheezing (Capriotti, 2020). The electrocardiogram confirmed that the patient has COPD.

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

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	**Docusate (Colace)**	**Levothyroxine (Synthroid)**	**Cefazolin (Ancef)**	**Zolpidem (Ambien)**	**Apixaban (Eliquis)**
Dose	**100 mg.**	**75 mcg.**	**2,000 mg.**	**12.5 mg.**	**2.5 mg.**
Frequency	**Daily, once**	**Daily**	**Every 8 hours**	**Every night**	**BID (Two times a day)**
Route	**Orally**	**Orally**	**IV Piggyback**	**Orally**	**Orally**
Classification	**Pharmacologic: Surfactant** **Therapeutic: Laxative, stool softener**	**Pharmacologic: Synthetic thyroxine** **Therapeutic: Thyroid hormone replacement**	**Pharmacologic: First generation cephalosporin** **Therapeutic: Antibiotic**	**Pharmacologic: Imidazopyridine** **Therapeutic: Hypnotic**	**Pharmacologic: factor Xa inhibitor** **Therapeutic: Anticoagulant**
Mechanism of Action	**Acts as a surfactant that softens stool by decreasing surface tension between oil and water in feces. This action lets more fluid penetrate stool, forming a softer fecal mass.**	**Replaces endogenous thyroid hormone, which may exert its physiologic effects by controlling DNA transcription and protein synthesis.**	**Interferes with bacterial cell wall synthesis by inhibiting the final step in the cross-linking peptidoglycan strands.**	**May potentiate the effects of GABA and other inhibitory neurotransmitters. Preserves deep sleep**	**Inhibits free and clot bound factor Xa and prothrombinase activity. Decreases thrombin generation and thrombus development.**
Reason Client Taking	**Constipation**	**Hypothyroidism**	**To provide surgical prophylaxis**	**Insomnia**	**To prevent DVT following knee**

					replacement surgery
Contraindications (2)	**Concomitant use with mineral oil; fecal impaction; hypersensitivity**	**Hypersensitivity, uncorrected adrenal insufficiency**	**Hypersensitivity to cefazolin, other cephalosporins or their components**	**Hypersensitivity, severe hepatic impairment, ritonavir therapy**	**Active pathological bleeding, severe hypersensitivity to apixaban**
Side Effects/Adverse Reactions (2)	**Dizziness, syncope, palpitations**	**Anxiety, fatigue, fever, headache**	**Chills, fever, headache, seizures**	**Aggressiveness, amnesia, behavioral changes, dizziness**	**Stroke, syncope, hypotension**

Medications Reference (APA):

Jones & Bartlett Learning. (2021). *Nurse's drug handbook* (20th ed.). Ascend Learning Company.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient was alert and oriented to person, place, time, and situation (x4)** **Patient showed no signs of distress** **Overall appearance: In a gown, hair seemed brushed, thin, grey, clear skin**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 20** **Drains present: Y☐ N ☒** **Type:**	**Skin color is within expected range for ethnicity. Smooth, warm, pink, and intact.** **Turgor presented as elastic with no rashes, bruises, or wounds.** **Braden score: 20 (low risk of pressure ulcer)**
HEENT:	**Head/Neck: Symmetrical, lymph nodes are not**

Head/Neck: **Ears:** **Eyes:** **Nose:** **Teeth:**	**palpable, and head appears to be normocephalic. Symmetrical trachea, no deviation presented.** **Ears: Symmetrical, no cerumen seen outside of ear canal, no trouble with her hearing.** **Eyes: Extraocular movements are within expected range. Patient wears glasses, but does not wear contacts. Symmetrical, pupils dilated bilaterally** **Nose: No deviated septum, symmetrical** **Teeth: Front teeth were not present; gums are pink and moist (Had to take out teeth prior to surgery).**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**S1 and S2 were audible, no murmurs heard, S3 and S4 were not heard** **Cardiac rhythm: Not within expected range, patient has COPD** **Peripheral pulses: Radial (3+), Brachial (2+), carotid (2+) bilaterally** **Capillary refill: Capillary refill within 2 seconds**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Abnormal lung sounds were heard upon auscultation. Patient is experiencing wheezing. Respiratory rate was 16 while seated on bed.** **Tracheal – Loud, within expected range** **Bronchovesicular – Loud, high-pitched** **Vesicular – Soft, blowing sound**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒**	**Patient states that her diet at home is regular. Her current diet is only soft foods, due to some of her teeth missing.** **Height: 5'6"** **Weight: 135 lbs.** **Auscultation bowel sounds: N/A** **Last BM: Last night (10/11/2021)** **Palpation: N/A** **Inspection:** **Distention, incisions, scars, drains, and wounds were not present on the patient.**

Nasogastric: Y ☐ N ☒ **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Urine was yellow and clear and shows no abnormal odor. The quantity of her output of urine was around 1,500 mL on 10/11/2021 and 200 mL of 10/12/2021 morning.**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score: 50** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	**Neurovascular status is within expected range. Range of motion is also within expected range. Has some weakness in her left knee due to surgery. Patient uses gait belt and walker for mobility. Most of her strength is intact beside the pain in her left knee.** **Fall score: 50 (Fall risk)** **Patient's activity/mobility status shows difficulty moving due to her pain in her knee. Patient is dependent and needs assistance with equipment and needs support when walking and standing.**
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☒ if no -** **Legs ☒ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Patient moves most of her extremities well. Patient has pain in her left knee and needs assistance walking and moving. Orientation is 4x. Patient's mental status is within expected range. Speech is within expected range and patient can articulate and speak clearly. Senses are all intact followed with her level 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):**	**Coping method(s): N/A** **Patient's developmental level is a bachelor's degree Religion: Methodist (Not as important).** **Personal/Family data: Lives at home with husband and son. Family support (Yes)**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1020	**64 bpm (Radial)**	**163/80 (RA)**	**12**	**36.4 C (Tympanic)**	**95% (O2 Nasal canula 3L)**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1020	**8/10**	**Knee (Left)**	**Unbearable pain**	**Throbbing**	**Pain medication (Hydrocodone, Percocet) Every 2 hours**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1, 383.58 mL (10/11/2021) **120 mL (10/12/2021, 0800-1020)**	**1,500 mL (10/11/2021)** **200 mL (10/12/2021, 0945-1020)**

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
• Include full nursing diagnosis with "related to" and "as	• Explain why the nursing diagnosis was		• How did the patient/family respond to the nurse's actions?

evidenced by" components	chosen		• Client response, status of goals and outcomes, modifications to plan.
1. Pain related to failed left knee replacement surgery as evidenced by, "My pain has been unbearable since the surgery."	**This was the patient's chief complaint. Patient is experiencing sever left knee pain.**	**1. Administer pain medication around the clock as scheduled or PRN.** **2. Change or adjust positions with pillows to support left knee every two hours.**	**Patient stated that the pain medication only brought her pain down from an 8 to a 6.** **Patient believes that the interventions and goals need some work. The patient believes that she needs a higher dosage in medication. I talked to the nurse about her concerns and the nurse spoke with the patient. Besides the pain, patient is comfortable.**
2. Fall risk related to pain in left knee as evidenced by "I don't have much mobility since my knee surgery and the pain."	**This was the patient's chief complaint. The patient has low mobility due to her knee replacement and pain.**	**1. Assistance in getting in and out of bed. Bed in low position and call light within reach.** **2. Administer pain medication around the clock as scheduled or PRN.**	**Patient believes that the interventions and goals implemented worked. Goal met.** **Patient believes that the interventions and goals need some work. The patient believes that she needs a higher dosage in medication. I talked to the nurse about her concerns and the nurse spoke with the patient. Besides the pain, patient is comfortable.**

Overall APA format (5 points):

Bartlett, J.B., Lynn, P.L., & Taylor, C.T. (2019). ***Fundamentals of nursing: The art and science of person-centered care*** **(9th ed.). Wolters Kluwer.**

Concept Map (20 Points):

Subjective Data

Patient states her pain as a 8 on a scale of 10
Patient states, "My pain has been unbearable since the surgery."
Patient states, "I don't have much mobility since my knee surgery and pain."

Nursing Diagnosis/Outcomes

related to failed left knee replacement as evidenced by, "My pain has been unbearable since the surgery."

Outcomes: **Patient stated that the pain medication only brought her pain down from an 8 to a 6.**

Fall risk related to pain in left knee as evidenced by "I don't have much mobility since my knee surgery and the pain."

Outcomes: Made sure that goal was met by putting the bed in a low position and putting the call within reach.

Objective Data

Patient's blood pressure was high dude to the pain felt in her left knee.

Pulse rate was a little low because the patient is mostly in bed due to the pain and immobility of the knee.

Patient Information

Patient is a 66 year old female with a history of **insomnia, migraine, osteoporosis, hypertension, hypothyroid, hyperlipidemia, depressive disorder, and chronic anxiety. Admitted d/t a failed knee replacement on 10/11/2021.**

Nursing Interventions

Administer pain medication around the clock as scheduled or PRN.

2. Change or adjust positions with pillows to support left knee every two hours.

Assistance in getting in and out of bed. Bed in low position and call light within reach.