N311 Care Plan # 2

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission 9/14/19	**Patient Initials** J.S.	**Age** 91	**Gender** Male
Race/Ethnicity Caucasian	**Occupation** U.S. Post Office	**Marital Status** Divorced	**Allergies** Sulfa antibiotics Sulfones
Code Status DNR	**Height** 69 inches	**Weight** 245.5 lbs.	

Medical History (5 Points)

Past Medical History: Muscle weakness, other abnormalities of gait & mobility, unsteadiness on feet, UTI, Unspecified (diastolic) Congestive Heart Failure, COPD, Type 2 DM, Diabetic Kidney Disease, BPH, Hypothyroidism, Hyperlipidemia, GERD, Gout, Macular Degeneration

Past Surgical History: Patient stated that he had a lung tap in 1936, a tonsillectomy and adenoid removal in 1938, an appendectomy in 1948, 2 hernial surgeries in 1952 and 1960, gallbladder removal in the 1960's, ear drum replacement in 1969, cataract surgery in the 2000's, sinus reconstructive surgery in 2013, and a benign growth removal from the back of the neck.

Family History: Patient stated his father died of colon cancer, mother passed away from a stroke at the age of 95, brother died of a heart attack, and sister has iron deficiency anemia.

Social History (tobacco/alcohol/drugs): Patient stated that he does not smoke or use drugs and has never done so. Patient also states that he does not drink alcohol due to it "upsetting his stomach."

Admission Assessment

Chief Complaint (2 points): Patient stated that he was having leg pain and that he felt dizzy after physical therapy.

History of present Illness (10 points): Patient stated that he had fallen last Friday and that was when his leg pain began. Patient stated his pain was located in both legs and knees. J.S. stated that he had woken up at 3 am with the leg pain this morning(9/30). Patient described pain as a "throbbing" pain. Patient stated the pain was aggravated after therapy. J.S. stated that "Tylenol helped a little, but the Lidocaine patch works the best." Patient rates his pain a 4 on a 0-10 pain scale.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): UTI.

Secondary Diagnosis (if applicable): Unspecified Diastolic (Congestive) Heart Failure

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

"Urogenital infections most commonly originate from entry of pathogens into the urethra" (Capriotti & Frizell, 2016, p. 175). The outward flow of urine protects the urogenital tract by flushing microorganisms from the body. Along with urinating, the body also produces immunoglobulin A which helps to prevent bacteria from sticking to the mucosa along the urinary tract. However, there are certain bacteria that can remain attached to the mucosa, these are known as gonococcus and *E.coli* (Capriotti & Frizell, 2016).

If the urine is unable to flow properly the bacteria and microorganisms are not able to be flushed out as sufficiently, and the urine acts as a medium for bacteria to grow (Capriotti & Frizell, 2016, p.515). Urinary stasis can be due to "chronic voluntary suppression of urination, sexual intercourse, urinary tract obstruction, instrumentation of the urinary tract, use of catheters not drained to gravity, and vesicouteral reflux"(Capriotti & Frizell, 2016, p.516).

UTI's are rare in men and should therefore be questioned and researched. "The most common reason for infection in older males is stasis of urine caused by obstruction of the urethra

because of BPH" (Capriotti & Frizell, 2016, p. 516). J.S. was admitted into the nursing home with a UTI; however he also has BPH. So, it is likely that the narrowing of his urethra may have caused urine to pool in his bladder leading to an increase of bacterial growth and resulting in a UTI.

Symptoms of UTI include: frequency of urination, urgency, dysuria, and sometimes hematuria. "UTI symptoms are caused by the inflammation and edema of the urethra and bladder" (Capriotti & Frizell, 2016, p.516).There are typically no physical changes based upon examination (Capriotti & Frizell, 2016).

UTI is diagnosed based upon a urinalysis and urine culture. Urinalysis will show red blood cells, positive leukocyte esterase (WBCs) and nitrates (bacteria). A culture indicating infection will often have a bacteria count greater than 10^5/mL (Capriotti & Frizell, 2016).

According to the Mayo Clinic, UTI's are treated with antibiotics such as Ceftriaxone, Cephalexin, Nitrofurantoin, Fosfomycin, and Trimethoprim/sulfamethoxazole. After taking antibiotics for a few days symptoms tend to clear up. The provider may also prescribe an analgesic to help with the dysuria. In severe cases the patient would need to be hospitalized and receive intravenous antibiotics (Mayo Clinic, 2019).

Pathophysiology References (2) (APA):

Capriotti, T., Frizell, J.P.(2016) *Pathophysiology: introductory concepts and clinical perspectives.* Philadelphia: F.A. Davis

Urinary tract infection(UTI)(2019). *Mayo clinic.* Retrieved on October 3, 2019 from https://www.mayoclinic.org/diseases-conditions/urinary-tract-infection/diagnosis-treatment/drc-20353453

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	**3.80 - 5.41 x 10^6/mcL**	3.88 x 10^6 / mcL		
Hgb	**11.3 - 15.2 g/ dL**	10.7 g/dL		Patient has diagnosis of hypothyroidism and UTI. Patient has diagnosis of COPD (Cleveland Clinic, 2019)
Hct	**33.2 - 45.3%**	31.8%		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
Platelets	**149 – 393 k/ mcL**	133 k/mcL		Patient has hypothyroidism, DM, and diagnosis of UTI (Mayo Clinic, 2019).
WBC	**4.0 - 11.7 k/ mcL**	7.3 k/mcL		
Neutrophils	**2.4 - 8.4 x 10^3/mcL**	4.3 x 10^3/ mcL		
Lymphocytes	**11.8 - 45.9%**	28.1%		
Monocytes	**4.4 – 12.0%**	6.7%		
Eosinophils	**0.0 – 6.3%**	6.1%		
Bands	**45.3-79.0%**	58.3%		

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-	**136-145 mmol/L**	138 mmol/ L		
K+	**3.5-5.1 mmol/L**	3.5 mmol/ L		
Cl-	**98-107 mmol/L**	99 mmol/L		
CO2	**22–29 mmol/L**	27 mmol/L		

Glucose	**70-99 mg/dL**	95 mg/dL		
BUN	**6-20 mg/dL**	16 mg/dL		
Creatinine	**0.50–0.90 mg/dL**	1.46 mg/dL		Patient has diagnosis of UTI(Mayo Clinic, 2019).
Albumin	**3.5-5.2 g/dL**	3.0 g/dL		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
Calcium	**8.6-10.4 mg/dL**	8.2 mg/dL		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
Mag	**1.6-2.4 mEq/L**	1.8 mEq/L		
Phosphate	**0.8-1.5 mmol/L**			
Bilirubin	**0.0-1.2 mg/ dL**	0.4 mg/dL		
Alk Phos	**35-105 U/L**	159 IntlUnit/L		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).

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**	straw		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
pH	**5.0-8.0**	5.0		
Specific Gravity	**1.005-1.034**	1.003		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
Glucose	**normal**	normal		
Protein	**Negative**	negative		
Ketones	**Negative**	negative		
WBC	**</= 5**	1/HPF		
RBC	**0-3**	<1/ HPF		
Leukoesterase	**negative**	negative		

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 0**	Yeast 30,000 cfu/mL		Patient has diagnosis of UTI (Capriotti & Frizell, 2016).
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Capriotti, T., Frizell, J.P.(2016) *Pathophysiology: introductory concepts and clinical perspectives.* Philadelphia: F.A. Davis

Mayo Clinic (2019). *Creatinine Test*. Retrieved on October 7, 2019 from https://www.mayoclinic.org/tests-procedures/creatinine test/about/pac-20384646

Mayo Clinic (2019). *High hemoglobin count*. Retrieved on October 7th, 2019 from https://my.clevelandclinic.org/health/diseases/17789-high-hemoglobin-count

Mayo Clinic(2019). *Thrombocytosis.* Retrieved on October 7, 2019 from https://www.mayoclinic.org/diseases-conditions/thrombocytosis/symptoms-causes/syc-20378315

Sarah Bush Lincoln Health Center (2019). *Reference range (lab values)*. Mattoon, IL.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

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

Medications (5 required)

Brand/ Generic	Lasix/ Furosemide	Zyloprim/ Allopurinol	Synthroid/ Levothyroxine Sodium	Glucophage/ Metformin HCl	Flomax/ Tamsulosin HCl
Dose	20 mg	200 mg	125 mg	1000 mg	0.4 mg
Frequency	QD	QD	QD	QD	QD
Route	PO	PO	PO	PO	PO
Classification	Anti-hypertensive, diuretic	Antigout	Thyroid Hormone Replacement	Antidiabetic	BPH treatment
Mechanism of Action	"Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation, As the body's plasma volume decreases, aldosterone production increases, which promotes sodium reabsorption and the loss of potassium and hydrogen ions. Furosemide also increases the	"Inhibits uric acid production by inhibiting xanthine oxidase, the enzyme that converts hypoxanthine and xanthine to uric acid. Allopurinol is metabolized to oxipurinol, which also inhibits xanthine oxidase"(Jones & Bartlett, 2019, p.41).	"Replaces endogenous thyroid hormone, which may exert its physiologic effects by controlling DNA transcription and protein synthesis. Levothyroxine has all the following actions of endogenous thyroid hormone. The drug: increases energy expenditure, accelerates the rate of cellular oxidation, differentiation and proliferation of stem cells,	"May promote storage of excess glucose as glycogen in the liver, which reduces glucose production. Metformin also may improve glucose use by adipose tissue and skeletal muscle by increasing glucose transport across cell membranes. This drug also may increase the number of insulin receptors on cell membranes	"Blocks alpha 1-adrenergic receptor in the prostate. This action inhibits smooth muscle contraction in the bladder neck and prostate, prostatic capsule, and prostatic urethra, which improves the rate of urine flow and reduces symptoms of BPH" (Jones & Bartlett, 2019, p. 1164).

	excretion of calcium, magnesium, bicarbonate, ammonium, and phosphate. By reducing intracellular and extracellular fluid volume, the drug reduces blood pressure and decreases cardiac output. Over time, cardiac output returns to normal" (Jones & Bartlett, 2019, p.546).		myelination of nerves, regulates growth, decreases cholesterol, enhances carb and protein metabolism" (Jones & Bartlett, 2019, p.694).	and make them more sensitive to insulin. In addition, metformin modestly decreases blood total cholesterol and triglyceride levels" (Jones & Bartlett, 2019, p.756).	
Reason Client Taking	Edema	Gout	Hypothyroidism	DM	BPH
Contraindications (2)	"Anuria unresponsive to furosemide; hypersensitivity to furosemide, sulfonamides, or their components" (Jones & Bartlett, 2019,	"Hypersensitivity to allopurinol or its components"(Jones & Bartlett, 2019, p.41).	"Hypersensitivity to levothyroxine or its components, uncorrected adrenal insufficiency" (Jones & Bartlett, 2019, p.694).	"Hypersensitivity to metformin or its components, metabolic acidosis (Jones & Bartlett, 2019, p.756).	"Hypersensitivity to tamsulosin, quinazolines or their components" (Jones & Bartlett, 2019, p.1164).

	p.546).				
Side Effects/ Adverse Reactions (2)	Arrythmias hyperglycemia	Chills epistaxis	Anxiety alopecia	Headache Metallic taste	Dizziness Dyspnea

Medications Reference (APA):

Jones & Bartlett (2019) *Nurse's drug handbook* (18th ed.) Burlington: Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient alert and oriented x3. Patient does not appear to be in distress. Patient appears comfortable and relaxed.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Patient's skin appropriate for ethnic background. Patient appears to have stasis dermatitis on lower legs bilaterally. Patient has erythema and scabbing on the inside of his right ankle. Patient has erythema on buttocks with a scab on the left side. J.S.'s skin appears thin with dry patches. Patient's skin is warm to touch. Skin turgor good, no tenting. Patient does not have bruises or rashes. Patient has wound on left side under breast that is erythematic. Patient scored 20 on Braden scale.

HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patient's head appears normocephalic and symmetric. Trachea midline. No palpable lymph nodes. Patient does not wear hearing aids, ears appear symmetric with no deformities or drainage. Patient states he wears glasses. EOMI. No drainage or any abnormalities present. Nose does not have any drainage and appears symmetric on patient's face. Patient has some broken and missing teeth. Oral mucosa appears pink and moist.
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:**	Patient has regular heart rate. S1 and S2 heard upon auscultation. No murmurs or S3, S4 present, no gallops or rubs. Patient's cardiac rhythm is even and regular. Peripheral pulses strong 3+. Capillary refill within normal limits, 2 seconds. Patient has edema in ankles. Right ankle has more edema than the left ankle.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Breath sounds present and clear to auscultation. No noted wheezes, rhonchi or crackles. Patient has CPAP machine.
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒**	Patient has LCS(Geriatric Diabetic) Diet, regular texture. Patient is 69 inches tall. Patient weighs 245.5 lbs. Bowel sounds present in all four quadrants. Patient states last bowel movement was at 0930. Patient does not complain of pain and no masses felt upon palpation. Patient's abdomen appears distended. Patient has scar on right side. Patient does not have drains or wounds.

Type:	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☒ N ☐** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	Patient states feelings of burning and irritation with urination. Patient's genitalia appears erythematic.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk☒**	Patient is able to participate in active ROM. Patient uses a walker and wheelchair for ambulation. Patient's strength is strong and equal bilaterally. Patient needs assistance with shower and using the toilet. Patient's Morse Fall Risk score is 65. Patient is a high fall risk.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. Patient alert and oriented x3. Speech is clear. Patient wears glasses. Patient states he has macular degeneration making it difficult to read. Patient has no hearing deficit. Patient is alert.
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):**	Patient seems well educated. Patient states that he is Presbyterian and has been attending church for 91 years. Patient states he has siblings nearby and keeps in touch with one of them. Patient states that daughter lives down the street and comes over frequently. Patient states his daughter has cerebral palsy.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	74	142/70	20	97.7	94%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1115	0-10 pain scale	Legs and knees bilaterally	4/10	Throbbing pain	Lidocaine patch and Tylenol

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired mobility related to dizziness as evidenced by unsteady gait requiring assistance for safe ambulation.	The patient has fallen in the past and is therefore at a greater risk for falling in the future which could lead to injury.	1.Patient will be assessed for orthostatic hypotension. 2.Patient will ambulate with staff 3 times per day until	Goal pending. Patient will be assessed during next set of vitals. Goal pending. Patient and staff continue to work on ambulation improvement.

		noticeable improvement in gait.	
2. "Potential for skin breakdown related to altered circulation and sensation occurring with peripheral neuropathy and vascular pathology"(Swearingen & Wright, 2019) as evidenced by open wound on patient's interior right ankle.	Skin breakdown leads to potential future complications and causes the patient discomfort. It is imperative to keep skin clean and dry.	1.Patient will have closure of interior right ankle wound by December 1st. 2.Patient will have wound care assess the wound as soon as possible for proper dressing usage.	Goal pending. Goal still in process. Open skin continues to be assessed. Goal met. Wound care assessed patient for proper dressing.

Other References (APA):

Swearingen, P.L., Wright, J.D., (2019) *All in one: nursing care planning resource* (5th ed).

Missouri: Elsevier

Concept Map (20 Points):

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Subjective Data

Patient complains of throbbing leg and knee pain that began early this morning. Patient rates current pain as a 4/10. Patient states Lidocaine patch eases pain.
Patient also complained of dizziness while using the bathroom after therapy. Patient stated he needed to call for assistance.

Nursing Diagnosis/Outcomes

Impaired mobility related to dizziness as evidenced by unsteady gait requiring assistance for safe ambulation.
Patient will walk with staff and be assessed for orthostatic hypotension.
“Potential for skin breakdown related to altered circulation and sensation occurring with peripheral neuropathy and vascular pathology”(Swearingen &Wright, 2019) as evidenced by open wound on patient’s interior right ankle.
Patient will see wound care and receive proper dressing care.

Objective Data

Blood pressure 142/70.
Patient has open wound on interior right ankle and below breast on left side.
Patient urine culture shows yeast and 30,000 cfu/mL.
Patient urinalysis shows straw color and decreased specific gravity.

Patient Information

91-year-old male patient admitted with UTI and CHF. Patient has history of DM and falls.

Nursing Interventions

Patient will be assessed for orthostatic hypotension.
Patient will ambulate with staff 3 times per day until noticeable improvement in gait.
Patient will have closure of interior right ankle wound by December 1st.
Patient will have wound care assess the wound as soon as possible for proper dressing usage.

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