N311 Care Plan # 4

Lakeview College of Nursing

April 15, 2020

Professor Cho RN, MSN

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Demographics (5 points)

Date of Admission **4/9/2020**	**Patient Initials** **JJ**	**Age** **78-year-old** **(3/15/1933)**	**Gender** Female
Race/Ethnicity **White/ N/A**	**Occupation** **Retired**	**Marital Status** **Widowed**	**Allergies** **NKA**
Code Status **Full Code**	**Height** **170cm (67in)**	**Weight** **71kg (156lbs)**	

Medical History (5 Points)

Past Medical History: Congestive Heart Failure, Diabetes

Past Surgical History: N/A

Family History: Unknown

Social History (tobacco/alcohol/drugs): Unknown

Admission Assessment

Chief Complaint (2 points): Congestive Heart Failure

History of present Illness (10 points):

On April 9, 2020, a 78-year-old White female was admitted from home to the ED at 0500 for urosepsis. When the female was transferred to the medical-surgical unit, she was having trouble breathing in the lung area. The female has a history of CHF. The difficulty breathing as been going on since her arrive to the medical-surgical unit. Her lung sounds are irregular with crackles, when she speaks you an hear wheezing and rasping. She is on 2L of oxygen by nasal canula for her O2sat only being 91%. Laying flat seems to irritate the difficulty breathing. The oxygen seems to relieve the difficulty breathing but only for short while. The pt is also prescribed cardiac medication that does not seem to be taken like it should be.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Urosepsis

Secondary Diagnosis (if applicable): Congestive Heart Failure

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

An UTI stands for urinary tract infection. A UTI is one of the main care visits per year for 6 to 7 million people (Capriotti, 2016, p. 515). A UTI is more common in women than men for simple reason that in women the rectum and urinary tract are close together making it easier for bacteria to colonize the urethra more easily. The bacteria can become more resistant to the urine and make it easier for them to migrate up the bladder even further (Capriotti, 2016, p. 515). The bacteria can also change the pH of the urine as well (Capriotti, 2016, p. 515). If the UTI becomes bad enough, it could turn into urosepsis, which is when the bacteria get into the bloodstream and are able to travel to other parts of the body (Capriotti, 2016, p. 516).

"Risk factors of a UTI, elderly individuals, catheterized individuals, pregnant women, males with BPH. In both men and women risk factors include: dehydration, diabetes, bladder cancer and cancer in tissues adjacent to the bladder, and cancer treatments" (Capriotti, 2016, p. 515). For the patient, she had diabetes, was an elderly individual, dehydrated, and had a catheter put in at the hospital.

Common signs and symptoms of a UTI, frequency urinating, pain or burning on urination, urgency, occasionally hematuria (Capriotti, 2016, p. 516). "UTI symptoms are caused by the inflammation and edema of the urethra and bladder" (Capriotti, 2016, p. 516). If the UTI is severe enough a person may experience fever, chills, confusion, disorientation, and hypotension (Capriotti, 2016, p. 516). For the patient, she was experiencing a fever, chills, confusion and disorientation at times.

Diagnostic testing to confirm that a patient has a UTI include: serum K+, and Na+ levels, BUN and creatinine, urinalysis, urine culture, Hgb and Hct levels, KUB radiography (kidneys, ureters, and bladder), ultrasonography, CT scans (Swearingen & D, 2019, p. 248). For the patient, she had a urinalysis done that showed abnormalities in the urine, Na+ level was low, Hct level was low, albumin was low, and WBC count was high.

Treatments associated with a UTI, antibiotic is the usual treatment for a lower UTI (Capriotti, 2016, p. 516). Cranberry juice can help decrease the risk of a UTI because it lessens the adherence of bacteria to the bladder wall in studies have shown (Capriotti, 2016, p. 516). The patient, she was receiving a hydration from IV fluids to help clear up the UTI. The patient was also receiving Levaquin to help treat the UTI.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J.P. (2016*). Pathophysiology: introductory concepts and clinical perspectives.* (1st ed.). Philadelphia, PA: F A Davis.

Swearingen, P.L., & D, J. (2019). *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health.* Elsevier.

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	**4.5-6.3**	**UNK**	**4.8**	**N/A**
Hgb	**14-18**	**UNK**	**11.3**	**N/A**
Hct	**41-51**	**UNK**	**33%**	**The Hct levels could be low because**

				of the pt malnutrition and not getting the right amount of nutrition for the body. (Hematocrit Blood Test: Normal, High, Low Ranges & Results, n.d.)
Platelets	**140-440**	**UNK**	**220**	**N/A**
WBC	**4-10**	**UNK**	**13**	**The WBC level is high because of the UTI. (Jane Vincent Corbett & Angela Denise Banks, 2019)**
Neutrophils	**2-6.9**	**UNK**	**N/A**	**N/A**
Lymphocytes	**0.6-3.4**	**UNK**	**N/A**	**N/A**
Monocytes	**0-8**	**UNK**	**N/A**	**N/A**
Eosinophils	**0-0.5**	**UNK**	**N/A**	**N/A**
Bands	**UNK**	**UNK**	**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-	**136-145**	**UNK**	**135**	**Sodium level could be low due to the UTI that the female pt has. (Mahajan & Simon, 2013)**
K+	**3.5-5.1**	**UNK**	**4.4**	**UNK**
Cl-	**98-107**	**UNK**	**100**	**UNK**
CO2	**21-31**	**UNK**	**N/A**	**UNK**
Glucose	**74-109**	**UNK**	**92**	**UNK**
BUN	**7-25**	**UNK**	**21**	**N/A**
Creatinine	**0.7-1.2**	**UNK**	**1.0**	**N/A**
Albumin	**3.5-5.2**	**UNK**	**3.2**	**The albumin level could be low due to the pt being an elderly female and not getting the proper nutrition she needs. (Albumin, 2016)**

Calcium	**8.6-10.3**	**UNK**	**9**	**N/A**
Mag	**UNK**	**UNK**	**N/A**	**N/A**
Phosphate	**UNK**	**UNK**	**N/A**	**N/A**
Bilirubin	**0.3-1.0**	**UNK**	**N/A**	**N/A**
Alk Phos	**40-130**	**UNK**	**N/A**	**N/A**

Reference:

Albumin. (2016, April 8). Labtestonline.org. Retrieved on April 15, 2020, from https://labtestsonline.org/tests/albumin.

Hematocrit Blood Test: Normal, High, Low Ranges & Results. (n.d.). EMedicineHealth. Retrieved April 15, 2020, from https://www.emedicinehealth.com/hematocrit_blood_test/article_em.htm#.

Jane Vincent Corbett, & Angela Denise Banks. (2019). *Laboratory tests and diagnostic procedures: with nursing diagnoses.* Pearson.

Mahajan, R., & Simon, E. G. (2013). *Urinary Retention as a Cause of Hyponatremia in an Elderly Man.* Indian Journal Clinical Biochemistry, 29(2), 260-261. Retrieved April 15, 2020, from https://doi.org/10.1007/s12291-013-0378-0.

Sarah Bush Lincoln Health Center (2020). *Reference Range (lab values).* Mattoon, IL.

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 Admissio	Today's Value	Reason for Abnormal

		n		
Color & Clarity	**Yellow (light/pale to dark/deep amber)**	**UNK**	**Cloudy/ Slight Amber**	**N/A**
pH	**4.5-8**	**UNK**	**5.6**	**N/A**
Specific Gravity	**1.005-1.025**	**UNK**	**1.039**	**The pt specific gravity of the urine is high due to the UTI. (Nall, 2018)**
Glucose	**Negative**	**UNK**	**Negative**	**N/A**
Protein	**Negative**	**UNK**	**2**	**The protein in the urine could be caused by dehydration, the pt having diabetes, or it is from the UTI. (What Causes Protein in Urine (Proteinuria), Symptoms, How to Treat it, n.d.)**
Ketones	**Negative**	**UNK**	**Negative**	**N/A**
WBC	**Negative**	**UNK**	**10**	**WBC are in the urine due to the UTI. (Urinalysis-Understand the Test & Your Results, 2016)**
RBC	**Negative**	**UNK**	**4-6**	**RBC are in the urine due to the UTI. (Nall, 2018)**
Leukoesterase	**Negative**	**UNK**	**Positive**	**In the urine due to the UTI. Enzyme present in WBC. (Urinalysis-Understand the Test & Your Results, 2016)**

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				**No cultures were completed for this pt.**

Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

Nall, R. (2018, September 12). *Why Are There Red Blood Cells in My Urine?* Healthline; Healthline Media. Retrieved April 15, 2020, from https://www.healthline.com/health/rbc-in-urine.

Nall, R. (2018, August 7). *Urine Specific Gravity Test*. Healthline; Healthline Media. Retrieved April 15, 2020, from https://www.healthline.com/health/urine-specific-gravity#results.

Urinalysis: Reference Range, Interpretation, Collection and Panels. (2019, November 9). Medscape.com. Retrieved April 15, 2020, from http://medicine.medscape.com/article/2074001-overview#a1.

Urinalysis-Understand the Test & Your Results. (2016, May 25). Labtestonline.org. Retrieved April 15, 2020, from https://labtestsonline.org/tests/urinalysis.

What Causes Protein in Urine (Proteinuria), Symptoms, How to Treat it. (n.d.). Healthline. Retrieved April 15, 2020, from https://www.healthline.com/health/what-causes-protein-in-urine#proteinuria-causes.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

- **Chest X-Ray: Was done on the lungs, no evidence of any focal area of consolidation. Faint rounded density is seen in the base of the left lower hemithorax probably**

representing a nipple shadow. The hilar and pulmonary vasculature is dilated consistent with long-standing mild chronic obstructive pulmonary disease. The heart size is enlarged consistent with hypertrophy of the left ventricle. Costophrenic angles are clear.

- **Left hip and femur/left elbow X-Ray: The left hip and femur it is a high intertrochanteric fracture/ basicervical. The left elbow had no fracture apparent.**

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

Medications (5 required)

Brand/ Generic	**Acetaminophen / Tylenol**	**Furosemide/ Lasix**	**Glyburide/ DiaBeta**	**Levofloxacin/ Levaquin**	**Lorazepam/ Ativan**
Dose	**325mg**	**20mg**	**2mg**	**2.5mg**	**250mg**
Frequency	**PRN (every 4 hours)**	**STAT**	**PRN (every 6 hours)**	**Daily (1x day)**	**Every 12 hours (2x day)**
Route	**PO**	**IV bolus**	**PO**	**PO**	**IV bolus**
Classification	**Antipyretic, nonopioid analgesic**	**Antihypertensive, diuretic**	**Antidiabetic**	**Antibiotic**	**Anxiolytic**

Mechanism of Action	**Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.**	**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.**	**Stimulates insulin release from beta cells in the pancreas. Glyburide also increases peripheral tissue sensitivity to insulin either by enhancing insulin binding to cellular receptors or by increasing the number of insulin receptors**	**Interferes with bacterial cell replication by inhibiting the bacterial enzyme DNA gyrase, which is essential for repair and replication of bacterial DNA**	**May potentiate the effects of GABA and other inhibitory neurotransmitters by binding to specific benzodiazepine receptors in cortical and limbic areas of CNS. GABA inhibits excitatory stimulation, which helps control emotional behavior.**
Reason Client Taking	**For fever greater than 100°F (37.7°C)**	**Reduce edema caused by CHF**	**Diabetes**	**To treat the UTI urosepsis**	**Agitation/ Restlessness**
Contraindications (2)	**Hypersensitivity to acetaminophen or its components, severe hepatic impairment, severe active liver disease**	**Anuria, hypersensitivity to furosemide or its components**	**Concurrent therapy with bosentan, diabetic ketoacidosis, hypersensitivity to glyburide, sulfonylureas, or their components**	**Hypersensitivity to levofloxacin, other fluoroquinolones, or their components: myasthenia gravis**	**Acute angle-closure glaucoma, hypersensitivity to lorazepam, its components, or benzodiazepines, intra-arterial delivery, premature infants, psychosis**
Side	**Hypotension,**	**Arrhythmia**	**Arrhythmi**	**Aortic**	**Apnea,**

Effects/ Adverse Reactions (2)	**hypertension, peripheral edema**	**s, elevated cholesterol and triglyceride levels, orthostatic hypotension, shock tachycardia, thromboembolism**	**as, edema, hypertension, vasculitis**	**dissection, arrhythmias, leukocytoclastic vasculitis, prolonged QT interval, rupture of aortic aneurysm, tachycardia, acute renal failure**	**respiratory depression, worsening of obstructive pulmonary disease or sleep apnea**

(2020 Nurse's drug handbook., 2020).

Medications Reference (APA):

2020 Nurse's drug handbook. (2020). Jones and Bartlett learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**A/O X3 to person, place, and time.** **Pt is having difficulty breathing.** **Well-groomed and appropriately dressed for place.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** .	 **Pink** **Dry** **Normal** **No elasticity** **N/A** **N/A** **N/A**

Braden Score: **Drains present: Y☐ N ☒** **Type: N/A**	**13 (Moderate Risk)**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 **Symmetrical and lymph nodes are no palpable** **TM pearly gray, symmetrical** **PERRLA** **Symmetrical, no deviation or turbinates or polyps** **No decay, moist, pink, and intact**
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: N/A**	 **Normal, present with S1 and S2, no murmurs, no gallops or rubs in S3 or S4.** **Regular** **Strong and Equal** **Less than 3 seconds**
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	**Wheezing and raspy sounds in the lungs.** **Lung sounds were irregular, crackles.** **Sputum production.**
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: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	 **Regular** **Regular** **170cm (67in)** **71kg (156lbs)** **Hypoactive present in all 4 quadrants** **4/8/2020 in the evening** **No pain on palpation** **N/A** **N/A** **N/A** **N/A** **N/A**
GENITOURINARY: **Color:**	 **Slight Amber**

Character: **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type: Foley** **Size: N/A**	**Cloudy** **1,340 mL output** **Normal**
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 ☐**	 **Normal, good in all extremities** **N/A** **Equal bilaterally, but weak** **High Risk (85)** **2 assists** **No, 2 assists** **Yes, 2 assists** **Yes, 2 assists**
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	 **Weak bilaterally** **A/O X3** **Appropriate** **Clear** **Alert** **A/O X3**
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):**	 **N/A** **Appropriate** **N/A** **Pt lives by themselves but has a neighbor that checks on her.**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0500	**96 beats per minute**	**136/76 mmHg**	**24 breathes per minute**	**37.4 °C (99.4 °F)**	**91% NC 2L of oxygen**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1400	**0 to 10 Numeric**	**Left Hip/ Femur**	**4 out of 10**	**N/A**	**Buck's Traction**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Regular **Total: 3,665mL** **IV: 2490mL** **IVPB: 60mL** **Intake: 810mL**	**Regular** **Total: 1,340mL** **Indwelling Catheter: 1,340mL**

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 Gas	**Related to the**	**1Assess all lung**	**Pt's lung sounds will be**

Exchanged	**difficulty breathing the patient has been having since arriving to the hospital as evidence by: that the pt O2 level keeps flexing and the nursing having to increase the oxygen level. 91% on 2L of oxygen and at the end of the day the pt was at a 88% on 6L of oxygen.**	**fields for breath sounds.** **2.Administer diuretics as prescribed.**	**clearer by the end of shift.** **The pt will release some of the excess fluid by the end of shift.**
2. Fluid Overload	**Related to the pt having difficulty breathing as evidence by: the pt having irregular lung sounds with crackles. When the pt speaks the nurse can hear wheezing and raspy. The pt getting a chest x-ray done.**	**1. Assess for edema in dependent areas such as the legs, ankles, feet, and sacrum.** **2.Monitor intravenous (IV) rate of flow. Use an infusion control device.**	**The pt will having pitting edema of 2 at the end of shift.** **The pt will not be getting an abundance of IV fluid by the end of the day.**

(Swearingen & D, 2019).

Other References (APA):

Swearingen, P.L., & D, J. (2019*). All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health.* Elsevier.

Concept Map (20 Points):

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Subjective Data

Pt was admitted due to a UTI (urosepsis). The pt has been c/o difficulty breathing. She has also stated, “She don’t feel good and I am cold.” Pt is on acetaminophen for when she gets a fever over 100℉.
Pt does not have a history of smoking, drinking alcohol, or doing recreational drugs.

Nursing Diagnosis/Outcomes

1. Impaired Gas Exchange, related to the difficulty breathing the patient has been having since arriving to the hospital as evidence by: that the pt O2 level keeps flexing and the nursing having to increase the oxygen level. 91% on 2L of oxygen and at the end of the day the pt was at an 88% on 6L of oxygen.
    - Pt’s lung sounds will be clearer by the end of shift.
    - The pt will release some of the excess fluid by the end of shift.
2. Fluid Overload, related to the pt having difficulty breathing as evidence by: the pt having irregular lung sounds with crackles. When the pt speaks the nurse can hear wheezing and raspy. The pt getting a chest x-ray done.
    - The pt will having pitting edema of 2 at the end

Objective Data

Vitals:
B/P: 136/76 mmHg
RR: 24 breathes per minute
O2 Sat: 91% on 2L of oxygen by NC
Chest X-Ray
WBC is elevated
Hct level is low
Na- is low
Albumin is low
Specific gravity of urine is high
Protein, WBC, RBC, Leukoesterase in the urine
Orders for a Lasix to take off the excess fluid.
Cardiac meds that were not being

Patient Information

A 78-year-old White female widowed was admitted from home to the ED at 0500.
The pt has a medical history of: congestive heart failure and diabetes.

Nursing Interventions

1 Assess all lung fields for breath sounds.

2. Administer diuretics as prescribed.

3. Assess for edema in dependent areas such as the legs, ankles, feet, and sacrum.

4. Monitor intravenous (IV) rate of flow. Use an infusion control device.

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N311 Care Plan #4