N431 Care Plan #3

Lakeview College of Nursing

Kristine Johnson

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
4 days ago	**B.M.**	**38 years old**	**Female**
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
caucasian	**Nurse**	**Married**	**Morphine sulfate, ragweed**
Code Status	**Height**	**Weight**	
Full Code	**5'1"**	**123 lbs**	

Medical History (5 Points)

Past Medical History: Hypertension, UTIs, Kidney stones

Past Surgical History: Cesarean section, Cholecystectomy in 2012
Family History: Mother – diabetes, Brother – diabetes, Father – MI
Social History (tobacco/alcohol/drugs): current smoker – 1 pack per day – has been a smoker for 10 years, casual drinker (1-2x per month), never drug use
Assistive Devices: N/A

Living Situation: home with husband and 8 children
Education Level: Bachelor's degree in nursing (RN BSN)

Admission Assessment

Chief Complaint (2 points): redness, swelling, and pain to the RLE

History of present Illness (10 points): Patient states that she was playing with her children outdoors and tripped over a rock, fell, and skinned her knee on the pavement. No alleviating factors. No precipitating factors.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Cellulitis

Secondary Diagnosis (if applicable):N/A

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

The patient came in complaining of redness, swelling, and pain in the right lower extremity and was given a primary diagnosis was cellulitis. Cellulitis is a bacterial skin infection that occurs from having a break in the skin, allowing opportunistic bacteria to get in and cause an infection in the lower extremities and can also occur on the face, arms, and other areas where the skin barrier is broken **(Mayo Clinic, 2020)**. Other risk factors can also include a weakened immune system, other skin conditions, lymphedema, obesity, and a history of cellulitis **(Mayo Clinic, 2020)**. The organisms that cause this infection are bacteria such as streptococcus and staphylococcus, and other diseases such as MRSA which are acquired by contact **(MedicineNet, 2019)**. Signs and symptoms of cellulitis include a red area of the skin that tends to expand, swelling, tenderness, pain, warmth, fever, red spots, blisters, and skin dimpling **(Mayo Clinic, 2020)**. Expected laboratory findings for cellulitis could include CBC for white blood cell count for indications of infection, and this patient had a white blood cell count of 17.4, which is a high abnormal finding. Diagnostic tests used are by having the doctor look at the skin and possibly making a blood test to confirm indications of infection along with the cellulitis **(Mayo Clinic, 2020)**. Treatment for this infection includes oral antibiotics to kill off the bacteria causing the cellulitis, and treatment can last 5-10 days and, at most, 14 days, depending on the prescription for the oral antibiotic**(Mayo Clinic, 2020)**. Other interventions for treatment for the client should include pain management. Those include teaching some at-home pain management can consist of using a cool damp cloth on the area for comfort, using over the counter pain medication, elevate the extremity, and ask the doctor if a compression wrap or stocking would help **(Mayo Clinic, 2020)**.

Pathophysiology References (2) (APA):

Mayo Clinic. (2020, February 6). *Cellulitis*. Retrieved April 25, 2020, from https://www.mayoclinic.org/diseases-conditions/cellulitis/symptoms-causes/syc-20370762

MedicineNet. (2019, July 15). *Cellulitis*. Retrieved April 25, 2020, from https://www.medicinenet.com/cellulitis/article.htm

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	**3.50-5.20**	**N/A**	**N/A**	
Hgb	**11.0-16.0**	**8.8**	**N/A**	**Can be possible anemia or low circulation of RBCs**
Hct	**34-47**	**N/A**	**N/A**	
Platelets	**140-400**	**N/A**	**N/A**	
WBC	**4.00-11.00**	**17.4**	**N/A**	**Can be indication of infection**
Neutrophils	**1.60-7.70**	**N/A**	**N/A**	
Lymphocytes	**1.00-4.90**	**N/A**	**N/A**	
Monocytes	**0.00-1.10**	**N/A**	**N/A**	
Eosinophils	**0.00-0.50**	**N/A**	**N/A**	
Bands	**45-74%**	**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**	**138**	**N/A**	

K+	**3.5-5.0**	**3.6**	**N/A**	
Cl-	**98-107**	**N/A**	**N/A**	
CO2	**21.0-32.0**	**N/A**	**N/A**	
Glucose	**60-99**	**N/A**	**N/A**	
BUN	**7-18**	**10**	**N/A**	
Creatinine	**0.55-1.02**	**1.67**	**N/A**	**Indication of kidney damage possible from an infection**
Albumin	**3.4-5.4**	**N/A**	**N/A**	
Calcium	**8.5-10.1**	**N/A**	**N/A**	
Mag	**1.6-2.6**	**N/A**	**N/A**	
Phosphate	**2.4-4.5**	**N/A**	**N/A**	
Bilirubin	**0.2-1.2**	**N/A**	**N/A**	
Alk Phos	**20-140**	**N/A**	**N/A**	
AST	**10-40**	**N/A**	**N/A**	
ALT	**7-56**	**N/A**	**N/A**	
Amylase	**0-137**	**N/A**	**N/A**	
Lipase	**12-70**	**N/A**	**N/A**	
Lactic Acid	**0.5-1**	**N/A**	**N/A**	
Troponin	**0.00-0.05 ng/mL**	**N/A**	**N/A**	
CK-MB	**5-25**	**N/A**	**N/A**	
Total CK	**22-198**	**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	0.8-1.1	N/A	N/A	
PT	11-13.5 sec	N/A	N/A	
PTT	30-40 sec	N/A	N/A	
D-Dimer	Negative	N/A	N/A	
BNP	<100	N/A	N/A	
HDL	40-56	N/A	N/A	
LDL	100-129	N/A	N/A	
Cholesterol	<100	N/A	N/A	
Triglycerides	<150	N/A	N/A	
Hgb A1c	5.7-6.4	N/A	N/A	
TSH	0.358-3.740 mcIU/mL	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	N/A	N/A	
pH	4.5-8.0	N/A	N/A	
Specific Gravity	1.002-1.030	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	Negative	N/A	N/A	

RBC	**Negative**	**N/A**	**N/A**	
Leukoesterase	**Negative**	**N/A**	**N/A**	

Arterial Blood Gas 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
pH	**7.35-7.45**	**N/A**	**N/A**	
PaO2	**80-100**	**N/A**	**N/A**	
PaCO2	**35-45**	**N/A**	**N/A**	
HCO3	**22-28**	**N/A**	**N/A**	
SaO2	**94-100%**	**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**	
Blood Culture	**NEGATIVE**	**N/A**	**N/A**	
Sputum Culture	**NEGATIVE**	**N/A**	**N/A**	
Stool Culture	**NEGATIVE**	**N/A**	**N/A**	

Lab Correlations Reference (APA):

Capriotti, T., Frizzell, J., (2016), *Pathophysiology Introductory concepts and clinical perspectives*. Philadelphia, PA, F.A. Davis Company

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest X-ray =negative for any acute abnormalities

EKG = shows NSR, no noted abnormalities

Right foot X-ray = negative for any acute abnormalities

Venous Doppler RLE = negative for DVT

Diagnostic Test Correlation (5 points): tests were done to rule out a DVT, monitor incase of a PE, and looking for a clot.

Diagnostic Test Reference (APA):

Kim Y. J. (2019). Red flag rules for knee and lower leg differential diagnosis. *Annals of translational medicine*, *7*(Suppl 7), S250. https://doi.org/10.21037/atm.2019.07.62

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

Home Medications (5 required)

Brand/Generic	Loratadine (Alavert)	Prenatal vitamin (vitafusion prenatal gummy vitamins)	Lisinopril (Prinivil)	Tamsulosin (Flomax)	Acetaminophen (Tylenol)
Dose	10 mg	2 gummies	20 mg	0.4mg	650mg
Frequency	Daily	daily	daily	daily	PRN
Route	PO	PO	PO	PO	PO
Classification	antihistamine	vitamin	Ace inhibitor	Benign prostatic hyperplasia	analgesic
Mechanism of Action	Selectively antagonizes peripheral histamine H1 receptors	Provides vitamins that the body doesn't produce	Inhibits angiotensin converting enzyme,	Relaxing smooth muscle and improving urine flow	Antipyretic effect via direct action on the hypothalamic heat-

			interfering w/ conversion of angiotensin I to angiotensin II		regulation center. Analgesic mech. Of action unknown.
Reason Client Taking	Allergies	Vitamin intake	Decrease blood pressure	Bladder blockage/ help urination	For pain management
Contraindications (2)	Hypersensitivity Caution if hepatic impairment	Iron metabolism disorder Overload of iron	Pregnancy Hypersensitivity	Hypersensitivity Caution if cataract surgery	Hypersensitivity Caution in hepatic impairment
Side Effects/Adverse Reactions (2)	Drowsiness Fatigue	Constipation and low appetite	Dizziness hypotension	Dizziness Rhinitis	Nausea rash
Nursing Considerations (2)	Cr. at baseline if renal disease Adjust dose frequently with hepatic impairment	N/a	Monitor BP Monitor electrolyte	Requires a prescription Not a controlled substance	Use caution in hepatic impairment Do not exceed 4g in one day
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Creatinine	N/A	BUN/Cr BP	No routine tests	No routine tests Can do pain assessment
Client Teaching needs (2)	Take as prescribed Contact physician if experience bronchospasm	Do not exceed dosage Do not use if inner seal is broken	Take your blood pressure prior Avoid use during pregnancy	Must have a prescription not available over the counter. No routine tests are needed	Do not exceed 4g in one day Used for pain and reducing fever

Hospital Medications (5 required)

Brand/Generic	Clindamycin (cleocin)	Acetaminophen (Tylenol)	Hydrocodone/ Acetaminophen (hycet)	Hydromorphone (dilaudid)	Docusate (Colace)
Dose	200mg	650mg	1 tab	0.5mg	100mg
Frequency	Q6h	Q6h PRN	Q4h PRN	Q4h PRN	BID PRN
Route	IV	PO	PO	IV	PO
Classification	lincosamides	analgesic	Opioid combos	Opioid	Stool softener
Mechanism of Action	Bacteriostatic or bactericidal, depending on susceptibility and concentration; binds to 50S ribosomal subunit, inhibiting protein synthesis	Antipyretic effect via direct action on the hypothalamic heat- regulation center. Analgesic mech. Of action unknown.	Antipyretic effect via direct action on the hypothalamic heat- regulation center. Analgesic mech. Of action unknown. Binds to various opioid receptors, producing analgesia and sedation	Binds to various opioid receptors, producing analgesia and sedation	Facilitates mixture of stool fat and water
Reason Client Taking	Treat an infection	Mild pain/fever	Moderate pain	Severe pain	Constipation
Contraindications (2)	Hypersensitivity Neonates	Hypersensitivity Caution in hepatic impairment	Hypersensitivity Severe Respiratory depression	Hypersensitivity Respiratory depression	Hypersensitivity Fecal impaction
Side Effects/Adverse Reactions (2)	Rash diarrhea	Nausea rash	Lightheadedness dizziness	Dizziness Somnolence	Diarrhea Abdominal cramps
Nursing Considerations (2)	Avoid use in neonates Can be in IM or IV form	Use caution in hepatic impairment Do not exceed 4g in one day	Monitor BP Risk of hypotension	Monitor respiratory depression prior and post administration	Monitor Bowel sounds Monitor output

				Monitor BP	
Key Nursing Assessment(s)/Lab(s) Prior to Administration	CBC BUN/Cr	No routine tests Can do pain assessment	Creatinine	Creatinine	No routine tests
Client Teaching needs (2)	This medication is used to treat an infection Use proper hand hygiene	Do not exceed 4g in one day Used for pain and reducing fever	Monitor BP daily Be aware of s/s of respiratory depression	Teach s/s of respiratory depression Teach there is a risk of hypotension so monitor BP	Report abdominal pain Track BMs incase of impaction

Medications Reference (APA):

Jones & Bartlett Learning. (2019) *2019 Nurse's Drug Handbook, eighth edition.* Burlington, MA, Jones & Bartlett Learning

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Alert and oriented x4 Welled dressed Appears well groomed No apparent distress
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	redness, swelling, and warmth to the RLE. No rashes, bruises, wounds, or drains Braden Score: 10
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:**	PERLA Ears: moist and pink Teeth: white, clean, no significant odor

Nose: **Teeth:**	Nose: moist and pink Head and neck midline
CARDIOVASCULAR (2 points): **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:**	3+ pitting edema to both feet, clear S1 and S2, normal sinus rhythm, cap refill < 3secs, no neck vein distention, Peripheral pulses +2, no neck vein distention, no murmurs
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	Lung clear in all quadrants No accessory muscle use
GASTROINTESTINAL (2 points): **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 ☐** **Type:**	Normoactive bowel sounds in all quadrants Regular diet Weight: 55.9kg Height: 5’1” Last BM unknown No pain during palpations No distention, incisions, scars, drains, or wounds No ostomy, NG, or feeding tubes/PEG tube
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:**	No pain or burning when voiding No dialysis No Catheter Urine yellow and clear Output of 1750 mL

Size:	
MUSCULOSKELETAL (2 points): **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**☐	Full ROM No supportive devices Independent – Stand by assist with ADL No numbness or tingling Strength equal bilaterally in arms and legs Skin pink, warm, pulses +2, full sensation and motor function. Fall Score:10
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. Orientation X4 Yes MAEW Yes, PERLA Yes, strength equal Alert Clear speech no slurred speech Felt sensation in extremities Full level of consciousness; no loss of consciousness
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Female Caucasian Mother and wife

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	**76**	**126/68**	**16**	**36.5**	**98%** **O2**
1100	**68**	**118/62**	**16**	**36.8**	**97%** **O2**

Vital Sign Trends: Blood pressure systolic pressure is slightly lower but that may be due to medications. Other vital signs are stable.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0700	**Numeric**	**Generalized pain**	**6/10**	**Generalized pain**	**Tylenol administered**
1100	**Numeric**	**Generalized pain**	**2/10**	**Generalized pain**	**No intervention currently**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	20G left AC inserted on admission→ no complications, patent, dressing clean/dry/intact

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
NS at 100 mL/hr. x 4 hours Tea PO 240 mL with breakfast Apple juice 120 mL with breakfast	Urine 1750 mL total voided in 4 hours Stool x2

Nursing Care

Summary of Care (2 points)

Overview of care: N/a

Procedures/testing done: CBC, Chest X-ray, EKG, Right foot X-ray, Venous Doppler RLE

Complaints/Issues: N/a

Vital signs (stable/unstable): Stable

Tolerating diet, activity, etc.: regular

Physician notifications: N/a

Future plans for patient: make a follow up appointment

Discharge Planning (2 points)

Discharge location: patient plans to discharge back home with her husband and children

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A

Follow up plan: Will follow up with PCP in 1 week following discharge.

Education needs: No noted discharge needs or case management concerns

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

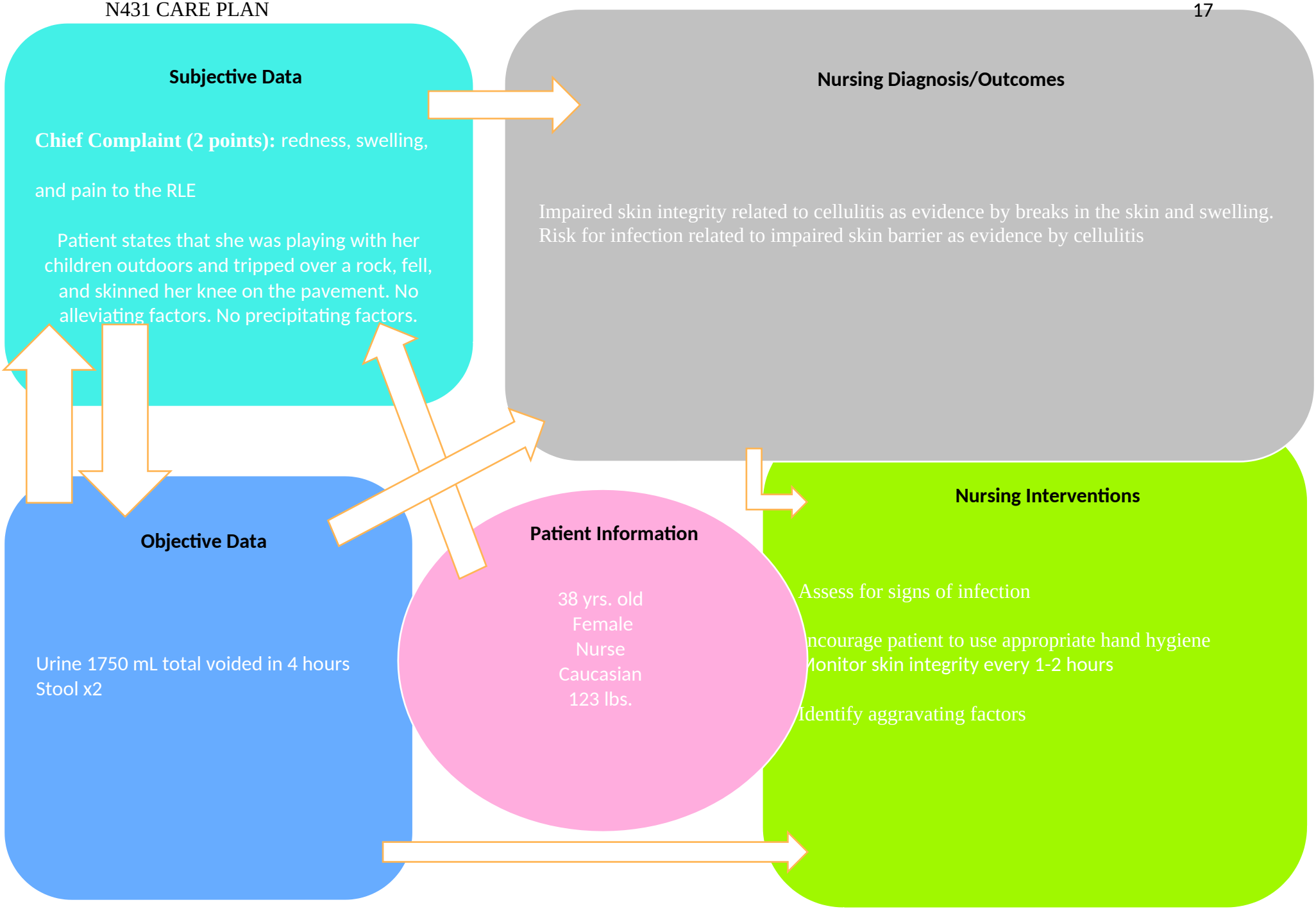
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Impaired skin integrity related to cellulitis as evidence by breaks in the skin and	The skin being swollen and red will increase the possibility of skin breakdown if moved for long periods of time.	1. Monitor skin integrity every 1-2 hours 2. Identify aggravating	The client allowed the nurse to assess the skin frequently and the nurse assessed pain level prior to each assessment

swelling.		factors	
2. Disturbed sensory perception related to impaired nerve stimulation evidence by swelling and redness	The swelling in the RLE can cause a decrease in sensory perception	1. assess neuromuscular status of the RLE 2.Elevate the leg to reduce swelling	The client asked why this was important and the nurse said being aware of sensation allows the body to know when to move and without it there is risk for skin break down.
3. Risk for infection related to impaired skin barrier as evidence by cellulitis	Although she already has an infection, she is at risk for a future infection after treatment if precautions are not taken	1. Assess for signs of infection 2. encourage patient to use appropriate hand hygiene	The client was understanding of needed to wash hands more often to reduce the risk of future or frequent infections.
4. Risk for situational low self-esteem related to changes in body appearance as evidence by swelling and redness of RLE.	The change in her leg appearance can affect her self esteem toward her body image.	1.assess patients' perception of changes to their body 2. Assess behavior towards change in appearance	The client stated that she does not feel like herself with the cellulitis on her leg. She becomes concerned that her children will be fearful. The nurse tells her that the antibiotic therapy should help, and the appearance should go down over time. The client appeared relieved after.

Other References (APA):

Belleza, M. (2017, September 26). *Cellulitis*. Nurseslabs. Retrieved April 25, 2020, from https://nurseslabs.com/cellulitis/#diagnosis

Concept Map (20 Points):


Subjective Data
Chief Complaint (2 points): redness, swelling, and pain to the RLE
Patient states that she was playing with her children outdoors and tripped over a rock, fell, and skinned her knee on the pavement. No alleviating factors. No precipitating factors.
Nursing Diagnosis/Outcomes
Impaired skin integrity related to cellulitis as evidence by breaks in the skin and swelling.
Risk for infection related to impaired skin barrier as evidence by cellulitis
Objective Data
Urine 1750 mL total voided in 4 hours
Stool x2
Patient Information
38 yrs. old
Female
Nurse
Caucasian
123 lbs.
Nursing Interventions
Assess for signs of infection
ncourage patient to use appropriate hand hygiene
Monitor skin integrity every 1-2 hours
Identify aggravating factors