N311 Care Plan # 1

Lakeview College of Nursing

Bridgette Montgomery

N311 Care Plan

Demographics (5 points)

Date of Admission 3-11-2020	Patient Initials ZS	Age 55 DOB:1-23-65	Gender Male
Race/Ethnicity White/NA	Occupation Plummer	Marital Status Single (Fiancé)	Allergies Penicillin-hives
Code Status Full Code	Height 6ft	Weight 80 Kg	

Medical History (5 Points)

Past Medical History: No past medical history

Past Surgical History: Tonsillectomy removed age 6

Family History: Paternal- Father had colon cancer

Social History (tobacco/alcohol/drugs):

Tobacco- 2 packs a day for 30 years

Alcohol- 24 pack a week

Drugs- No drug use

Admission Assessment

Chief Complaint (2 points): Nausea, pressure in belly and pain on his sacrum.

History of present Illness (10 points):

Patient is a 55-year-old male on the Medical-Surgical unit with a recent diagnosis of colorectal cancer. Patient complains of nausea, and pressure in is belly since last night. Patient states the NG tube has not been emptied since last night. Patient also states his butt hurts and he hasn't been turned all night and has been in been since last night with a pain rating of a 5 and that it's a burning pain. He has been using his PCA for pain, but it doesn't seem to be helping and that when he is able to shift himself to off his bottom helps him relieve his pain.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Colorectal Cancer

Secondary Diagnosis (if applicable): Pneumonia

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

Colorectal Cancer

Colorectal cancer is the second leading cause of death resulting from cancer. It is a preventable disease if individuals utilize the recommended screening procedures, which include colonoscopy and FOBT. In 2010, the Centers for Disease Control and Prevention reported that 58.6% of adults had undergone some form of colon cancer screening, and 54% of adults had undergone colonoscopy within the last 10 years. Although most cases of colon cancer require surgery, new chemotherapy agents discovered in the last 10 years are lowering the prevalence of the disease.
Peak incidence for colorectal cancer is between ages 60 and 79 years. Fewer than 20% of cases develop before age 50 years. There is a disproportionally higher incidence and rate of death from colon cancer in African Americans than in Caucasians. Hispanic persons have the lowest incidence and mortality from colorectal cancer. The incidence of colorectal cancer is about equal for males and females.

Etiology

Current research indicates that genetic factors have the greatest correlation to colorectal cancer. Colon cancer usually starts as a polyp, a tumorous mass that projects into the intestinal lumen. Familial adenomatous polyposis (FAP) is a well-defined hereditary disorder that predisposes an individual to intestinal polyps; it is an autosomal dominant condition caused by a mutation of the gene located at chromosome 5q21, also called the adenomatous polyposis coli (APC) gene. The APC gene is a defective tumor suppressor gene, and it confers an almost 100% likelihood of colon cancer development. In FAP, patients typically develop 500 to 2,500 colonic polyps that cover the mucosal surface of the bowel. Polyps in FAP can become cancerous at an early age; some in childhood. Another similar condition, Hereditary Non-polyposis Colorectal Cancer (HNPCC), is an autosomal dominant familial syndrome characterized by multiple colonic polyps with cancerous potential. There is a smaller number of polyps in HNPCC than in FAP, and HNPCC confers approximately a 40% chance of development of colon cancer.

Although genetic susceptibility is a significant risk factor, most colorectal cancer occurs sporadically in the absence of well-defined familial syndromes. Risk factors include obesity, tobacco use, physical inactivity, insulin resistance, low fiber in the diet, high amount of animal fat in the diet, and diets low in vitamin A, C, and E.

Pathophysiology

Colon cancer most commonly begins as a polyp, which goes through a number of changes to become cancerous. Polyps with cancerous potential are called adenomatous polyps. Approximately 90% of polyps are small, usually smaller than 1 cm in diameter, and have a small potential for malignancy. The remaining 10% of adenomas are larger than 1 cm and approach a 10% chance of containing invasive cancer. On a molecular level, colon cancer is caused by genetic changes that result in defective tumor suppressor genes, activated oncogenes, or mismatched gene repair. Commonly, an accumulation of multiple genetic mutations results in the progression of normal colonic mucosal cells to benign adenoma to adenomatous polyp to adenocarcinoma. The three types of adenomatous polyps (polyps with cancerous potential)—tubular adenomas, villous adenomas, and tubulovillous adenomas—are characterized as follows.

- Tubular adenomas, also called pedunculated adenomas, have a mass with a stalk coming off the intestinal wall.
- Villous adenomas, also called sessile polyps, have finger like projections without stalks that invade the intestinal wall. Villous adenomas are more difficult to remove and have a higher risk of cancerous changes than tubular adenomas.
- Tubulovillous adenomas have characteristics of both tubular and villous adenomas.

Some precancerous lesions are not polyps but flat. A flat area of dysplasia that is confined to the mucosa of the intestinal wall is called carcinoma in situ, which is considered premalignant. When the dysplastic tissue invades the intestinal wall more deeply, it is considered adenocarcinoma.

Clinical Presentation

Colorectal cancer can remain asymptomatic for years. Symptoms develop insidiously and frequently have been present for months before the affected individual seeks medical care. Symptoms include fatigue, weakness, weight loss, iron deficiency anemia, changes in bowel habits, melena (blood in the stool), diarrhea, and constipation. Lower bowel cancers can present with hematochezia (rectal bleeding) and narrowing of stool caliber.

Iron deficiency anemia can be a sign of slow, GI blood loss. Slow GI blood loss occurs in peptic ulcer, esophageal varices, and colon cancer. Colon cancer causes a constant microscopic leakage of blood into the intestine. Blood—an iron source within the body—is slowly depleted. It is important to check for GI blood loss in individuals with iron deficiency anemia. This can be done with performance of an FOBT and colonoscopy to assure that an occult colon cancer is not present.

All colorectal cancers spread by direct extension into adjacent structures and by metastasis through the lymphatics and bloodstream. Spread commonly occurs to regional lymph nodes, liver, lungs, and bones. Staging of colorectal cancers is based on depth of tumor invasion. The TNM anatomic system and the Dukes classification system are used to stage colorectal cancers.

Diagnosis

Both diagnostic tests and laboratory tests are used to diagnose colorectal cancer in patients. Diagnostic tests for colorectal cancer include colonoscopy, DRE, FOBT, and barium enema. Virtual colonoscopy involving a CT or MRI scan can be performed for screening. Capsule endoscopy using an ingestible, camera-equipped capsule is available as a means of virtual colonoscopy. However, this procedure has lower accuracy than colonoscopy. Flexible sigmoidoscopy is performed in some settings for colon cancer screening, although this procedure cannot examine the entire colon.

Laboratory tests include complete blood count, serum iron, serum ferritin, CEA, and liver enzymes. Stool DNA tests have been developed that detect mutant, fragmented, and methylated DNA from exfoliated colon tumor cells in stool. Genetic testing of blood samples can detect most cases of HNPCC and FAP.

Treatment

Treatment involves surgical resection of the tumor and evaluation for metastasis. The entire peritoneum should be examined including the liver, pelvis, and diaphragm. Periodic surveillance should take place after surgery. Tests include annual colonoscopy and CEA blood tests every 3 months. Radiation to the pelvis is recommended for patients with cancers of the lower bowel.

Chemotherapy is recommended for some patients and has shown modest benefit. Survival rate is related to the stage of the tumor, lymph nodes involved, and presence of metastasis.

Some studies have demonstrated that medical treatment with nonsteroidal anti-inflammatory drugs (NSAIDs)decreases the number and the size of colonic polyps. One study suggests that aspirin may reduce the incidence of recurrent colonic polyps, particularly advanced colonic polyps in patients with a high risk of colon cancer. These drugs are not yet considered preventive medications for colonic polyps.

Pathophysiology References (2) (APA):

Capriotti, Theresa, and Joan Parker Frizzell. *Pathophysiology : Introductory Concepts and Clinical Perspectives*. Philadelphia, F.A. Davis Company, 2016.

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**	**3.9**	**GI blood loss from colon cancer**
Hgb	**14-18**	**UNK**	**11.4**	**Dietary deficiency, low RBC**
Hct	**41-51**	**UNK**	**36**	**Dietary deficiency, low RBC**
Platelets	**140-440**	**UNK**	**140**	
WBC	**4-10**	**UNK**	**15.6**	**Infection**
Neutrophils	**2-6.9**	**UNK**	**81.4**	**Infection, Trauma (surgery)**
Lymphocytes	**0.6-3.4**	**UNK**	**1.0**	
Monocytes	**0-8**	**UNK**	**6**	
Eosinophils	**0-0.5**	**UNK**	**0.1**	
Bands	**UNK**	**UNK**	**UNK**	

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-	16-145		142	
K+	3.5-5.1		4.2	
Cl-	98-107		99	
CO2	21-31		28	
Glucose	74-109		91	
BUN	7-25		15	
Creatinine	0.7-1.2		0.8	
Albumin	3.5-5.2		2.0	Malnutrition, patient in NPO and not getting the correct nutrition
Calcium	8.6-10.3		9.0	
Mag	UNK		UNK	
Phosphate	UNK		UNK	
Bilirubin	0.3-1.0		0.5	
Alk Phos	40-130		60	

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				
pH				

Specific Gravity				
Glucose				
Protein				
Ketones				
WBC				
RBC				
Leukoesterase				

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				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (APA):

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

Kathleen Deska Pagana, and Timothy James Pagana. *Mosby's Manual of Diagnostic and Laboratory Tests*. St. Louis, Missouri, Elsevier Mosby, 2014.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

CXR- LLL consolidation

N311 Care Plan

CT of pelvis = mass in sigmoid colon

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

Medications (5 required)

Brand/Generic	**Promethazine/ Anergan 25, Anergan 50, Antinaus 50, Histantil (CAN), Pentazine, Phenazine 25, Phenazine 50, Phencen-50, Phenerzine, Phenoject-50, Pro-50, Promacot, Pro-Med 50, Promet, Prorex-25, Prorex-50, Prothazine, Shogan, V-Gan-25, V-Gan-50**	**Cefazolin/ Ancef, Kefzol**	**Metronidazole / Flagyl, Flagyl ER, Protostat, Trikacide (CAN)**	**Famotidine / Pepcid, Pepcid AC**	**Enoxaparin / Levenox**
Dose	**50mg**	**1000mg**	**500mg**	**20mg**	**40mg**
Frequency	**Q6h prn nausea**	**Q8h**	**Q6h**	**Q12h**	**Daily**
Route	**IV/IM**	**IVPB**	**IVPB**	**IVPB**	**SQ**
Classification	**Pharmacologic class: Phenothiazine Therapeutic class: antiemetic, antihistamine, antivertigo, sedative-hypnotic**	**Pharmacologic class: 1st-generation cephalosporin Therapeutic class: antibiotic**	**Pharmacologic class: Nitroimidazole Therapeutic class: antiprotozoal**	**Pharmacologic class: Histamine-2 blocker Therapeutic class: antiulcer agent**	**Pharmacologic class: Low-molecular-weight heparin Therapeutic class: anticoagulant**

Mechanism of Action	**Competes with histamine for H_1-receptor sites, thereby antagonizing may histamine effects and reducing allergy signs and symptoms. Promethazine also prevents motion sickness and nausea, and vertigo by acting centrally on medullary chemoreceptive trigger zone and by decreasing vestibular stimulation and labyrinthine function in the inner ear. It also promotes sedation and relieves anxiety by blocking receptors sites in CNS, directly reducing stimuli to the brain.**	**Interferes with bacterial cell wall synthesis by inhibiting the final step in the cross-linking of peptidoglycan strands. Peptidoglycan can make cell membranes rigid and protective. Without it, bacterial cells rupture and die.**	**Undergoes intracellular chemical reduction during anaerobic metabolism. After metronidazole is reduced, it damages the DNA's helical structure and breaks its strands, which inhibits bacterial nucleic acid synthesis and causes cell death.**	**In normal digestion, parietal cells in the gastric epithelium secrete hydrogen ions which combine with chloride ions to form hydrochloric acid. However, HCl can inflame, ulcerate, and perforate gastric and intestinal mucosa normally protected by mucosa. Famotidine reduces HCl formation by preventing histamine from binding with H^2 receptors on the surface of partietal cells. by doing so the drug helps prevent peptic ulcers from forming and helps heal existing ones.**	**Potentiates the action of antithrombin III, a coagulation inhibitor. By binding with antithrombin III, enoxaparin rapidly binds with inactivates clotting factors. Without thrombin, fibrinogen can't convert to fibrin and clots cant from.**
Reason Client Taking	**Nausea**	**Antibiotic**	**Antibiotic**	**Antiulcer agent**	**Anticoagulant**
Contraindications (2)	**Angle-closure glaucoma, benign prostatic hyperplasia**	**Hypersensitivity of cefazolin, other cephalosporins of their**	**Hypersensitivity to metronidazole or its components, disulfiram**	**Hypersensitivity to famotidine, other H_2-receptor antagonist**	**Active major bleeding, history of heparin-induced**

		components.	**use within past 2 weeks**	**s, or their componen ts**	**thrombocy topenia (HIT)**
Side Effects/Advers e Reactions (2)	**Bradycardia, hypertension**	**Fever, seizures**	**Chest pain, palpitations**	**Arrhythmi as, palpitation s**	**Atrial Fibrillatio n, congestive heart failure**

Medications Reference (APA):

2020 Nurse's Drug Handbook. Burlington, Ma, Jones & Bartlett Learning, 2020.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**A&O x's 3** **Client is well groomed**
INTEGUMENTARY: **Skin color: normal for race** **Character: dry** **Temperature: normal** **Turgor: no tenting less than 3 seconds** **Rashes: none** **Bruises: none** **Wounds: dressing clean dry and intact** **Braden Score: 19** **Drains present: Y☒ N ☐** **Type: JP drain**	
HEENT: **Head/Neck: symmetric lymph nodes non palpable** **Ears: pearly gray TM** **Eyes: PERRLA** **Nose: no turbanates or polyps** **Teeth: no decay, good condition, oral mucosa pink and intact**	.
CARDIOVASCULAR:	.

Heart sounds: S_1 S_2 heard **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): regular** **Peripheral Pulses: strong and equal** **Capillary refill: less than 3 seconds** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Wheezes in the RML** **Coarse crackles in the LLL** **Client is on 2ml nasal canula**
GASTROINTESTINAL: **Diet at home: Regular** **Current Diet NPO** **Height: 6ft** **Weight: 80 kg** **Auscultation Bowel sounds: hypoactive in all 4 quadrants.** **Last BM: morning of 3-11-2020** **Palpation: Pain, Mass etc.: pain** **Inspection:** **Distention: none** **Incisions: dressing clean and intact** **Scars: none** **Drains: JP- serasangous** **Wounds: none** **Ostomy: Y ☒ N ☐** **Nasogastric: Y ☒ N ☐** **Size: 14** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY: **Color: amber** **Character: clear but dark** **Quantity of urine: 350 ml** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals: normal** **Catheter: Y ☒ N ☐** **Type: Foley** **Size: 12**	
MUSCULOSKELETAL: **Neurovascular status:**	

ROM: good **Supportive devices: walker** **Strength: weak bilaterally** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 60- high risk** **Activity/Mobility Status: assist 2** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk☒**	
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒weak bilaterally** **Orientation: A&O x's 3** **Mental Status:** **Speech: clear** **Sensory: no impairment** **LOC:**	
PSYCHOSOCIAL/CULTURAL: **Coping method(s): has fiancé** **Developmental level: appropriate for age** **Religion & what it means to pt.: unknown** **Personal/Family Data (Think about home environment, family structure, and available family support):**	**Has good support system fiancé states "we are a team".**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	**90**	**144/82**	**24**	**37.7ºC**	**92 on 2ml Nasal canual**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	**Numeric scale**	**Abdominal and sacum**	**5**	**Burning, nausea & pressure**	**Turned patient, PCA, cleared NG**

					tube

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
1000 ml IV fluid, 500ml IV Cefazolin, 250ml Metronidazole= 1750 ml intake	**600ml emesis, 350ml urine output, 10 ml in colostomy bag-pure blood, 90ml in JP drain = 1050 ml output**

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. Acute pain related surgical incision as evidenced by the patient stating he is a 5 out 10 on the numerical pain scale.	**Patient said he was in pain and patients' comfort is one of the main concerns for the nurse to address.**	**1. Teach patient use of the PCA** **2. Reassess patient pain every 2 hours**	
2. Potential for Nosocomial Pneumonia related invasive procedures as evidenced by coarse crackles in RML.	**Patient was coughing and has coarse crackles in RML.**	**1. Teach patient to deep breathing, coughing, turning in bed, splinting wound before breathing exercises, ambulation, maintaining fluid intake and use of hyperinflation device.** **2.Perform**	

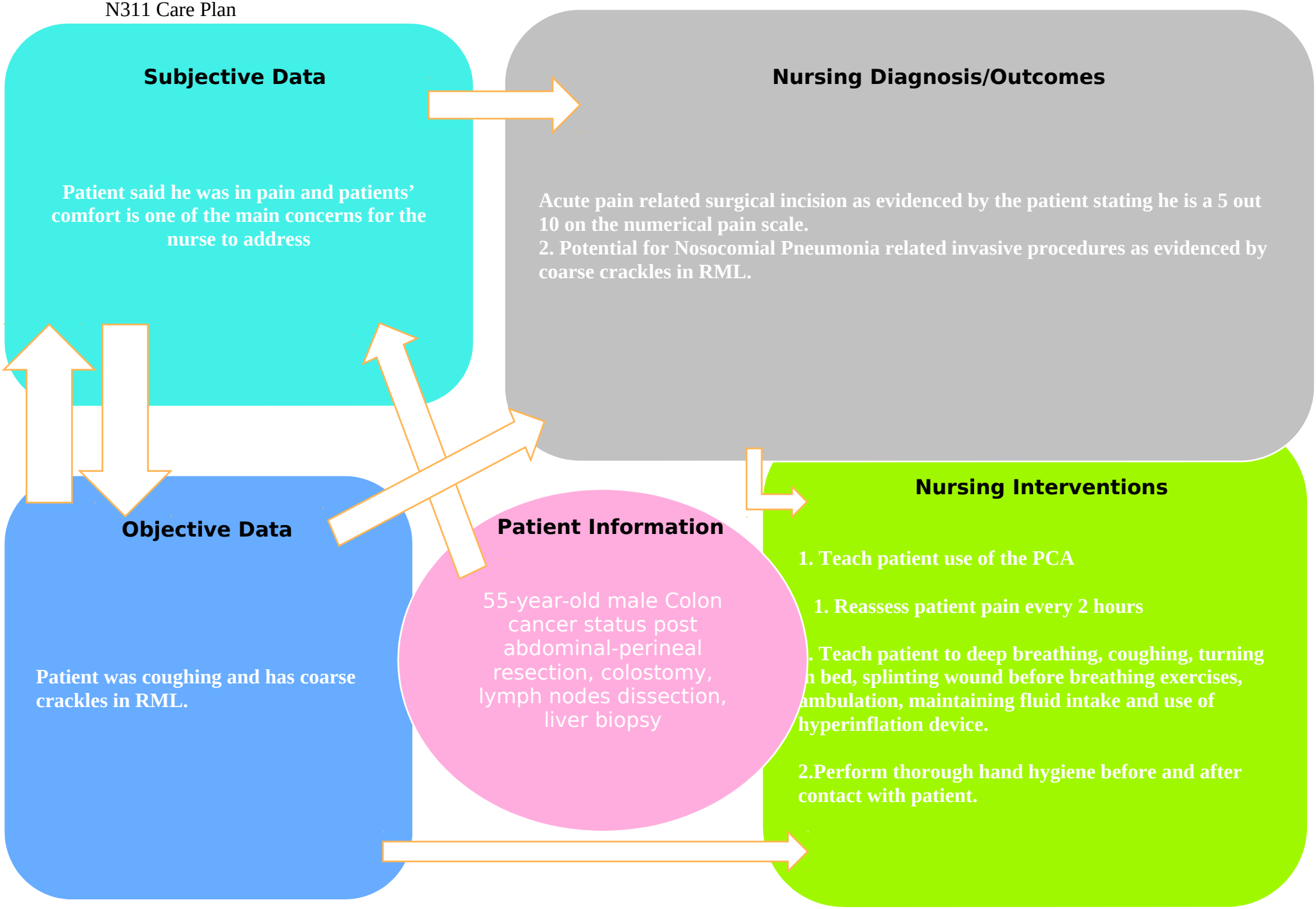
		thorough hand hygiene before and after contact with patient.	

Other References (APA):

Swearingen, Pamela L, and Jacqueline D. *All-in-One Nursing Care Planning Resource : Medical-Surgical, Pediatric, Maternity, and Psychiatric-Mental Health*. St. Louis, Missouri, Elsevier, 2019.

Concept Map (20 Points)

N311 Care Plan



N311 Care Plan

N311 Care Plan