N321 Care Plan #1

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
8-27-20	MS	64	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Retired CNA	Married	Bactrim-rash Erythromycin base-Hives
Code Status	**Height**	**Weight**	
Full code	5ft 4in	158lbs	

Medical History (5 Points)

Past Medical History: Type II diabetes, Hyperlipidemia, Obesity, Hypertension, Coronary arteriosclerosis, Mitral valve prolapse, Iliac artery stenosis, COPD, Esophagitis, Stenosis of abdominal aorta, Bilateral arthritis of knees, Diverticulitis, Hypocalcemia, hypomagnesemia.

Past Surgical History: Hysterectomy, Gallbladder surgery-2016, Stent X2- 2016, EGD-2019, Colonoscopy- 2019, Cecal mass removal-2020.

Family History: Father- Lung cancer. Paternal grandparents- Diabetes.

Social History (tobacco/alcohol/drugs): Does not drink. Smoked 1 ½ packs of cigarettes daily for 35-40 years but has recently (about a month ago) quit.

Assistive Devices: uses a cane daily and a walker as needed.

Living Situation: lives at home with her husband.

Education Level: High school, and CAN license.

Admission Assessment

Chief Complaint (2 points): Patient had colonoscopy- cecal mass found and came in for her scheduled surgery.

History of present Illness (10 points): Patient is a 64-year-old female that was admitted after her scheduled surgery. The patient was admitted on 8-27-2020 with complications due to her COPD and pneumonia. The patient complained of mild stomach pain around the surgical area but overall "feels better than she has in weeks." Incision site looks good and abdomen is not tender or rigid. The patient had an O2 level of 93% with 3.5 L/min nasal cannula, respirations of 24, BP of 156/67, temp was 97.8 and a HR of 90.

Primary Diagnosis

Primary Diagnosis on Admission (2 points):. Cecal mass- excision of colon. COPD complications.

Secondary Diagnosis (if applicable):.COPD.

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

Chronic Obstructive Pulmonary Disease is a combination of chronic bronchitis, emphysema, and hyperreactive airway disease. COPD is characterized by poorly reversible airflow limitation caused by these three characteristics. Airflow is obstructed due to narrowing, excessive mucus and fibrosis in the bronchioles, loss of alveolar elastic recoil, and smooth muscle hypertrophy.

COPD causes poor ventilation and hypoxia which can cause pulmonary arterial vasoconstriction or pulmonary hypertension. Chronic pulmonary hypertension causes right ventricle hypertrophy and eventually right ventricular failure. Levels of CO2 are always increased and in severe cases hypoxia becomes the stimulus for breathing.

Some signs and symptoms of COPD include; Shortness of breath, wheezing, chest tightness, chronic cough, frequent respiratory infections, lack of energy, weight loss, and

edema (Mayo Clinic, 2020). Patients with COPD will have a productive cough, may have clubbing of the fingers, use accessory muscles when breathing, and can seem to be in respiratory distress. To diagnose COPD Pulmonary function tests are done as well as CBC's, ECG's, and ABG's.

Respiratory rate, rhythm, and depth will be key vital signs to watch in a patient with COPD. Respiratory rate may be labored, and depth may be altered. Blood pressure may be slightly high, and wheezing is common. COPD is not curable but can be managed. Bronchodilator agents are given for short term relief. Oxygen therapy is given, and pneumococcal vaccines are recommended. Patient should stop smoking to manage COPD.

The patient has smoked cigarettes for 35-40 years and has just recently stopped. She has Pneumonia (common complication of COPD) so was put on oxygen due to labored breathing. WBC and neutrophil count were high because of the pneumonia. A mixture of COPD and pneumonia caused the patient to feel weak and tired. CO2 levels were also low. Labs were drawn daily, and antibiotics were given.

Pathophysiology References (2) (APA):

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

Mayo Clinic. (2020, April 15th). ***COPD.*** **https://www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679**

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	3.90-4.98	4.78	3.95	
Hgb	12.0-15.5	14.0	11.4	
Hct	35-45	42.6	34.7	
Platelets	140-400	236	275	
WBC	4.0-9.0	11.8	19.8	WBC'S are high due to infection and stress on the body post surgery (Capriotti and Frizzell, 2016).
Neutrophils	40-68%	61.7	81.9	Neutrophils can be high due to infection (Capriotti and Frizzell, 2016).
Lymphocytes	18-49%	26.9	8.4	Lymphocytes can be low due to infection (Capriotti and Frizzell, 2016).
Monocytes	3.0-13.0%	9.4	6.8	
Eosinophils	0.0-8.0%	1.1	0.0	
Bands	0.0-1.0%	NA	NA	

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	134	134	Sodium levels can be low due to infection (Capriotti and Frizzell, 2016).
K+	3.5-5	3.5	4.4	
Cl-	95-105	103	97	
CO2	21-31	20	26	CO2 can be low as a result of

				diabetes type II. Patient has diabetes type II. (Capriotti and Frizzell, 2016).
Glucose	**70-110 mg/ dl**	**148**	**262**	**Glucose can be high as a result of type II diabetes (Capriotti and Frizzell, 2016).**
BUN	**7-25 mg/dL**	**7.35**	**15.15**	
Creatinine	**0.50-1.20 mg/dL**	**0.68**	**0.68**	
Albumin	**3.5-3.7 g/dL**	**3.2**	**3.3**	**Albumin can be low from an inflammatory disease like COPD (Capriotti and Frizzell, 2016).**
Calcium	**8.8-10.2 mg/dL**	**8.2**	**8.2**	**Low calcium can be caused by hypocalcemia (which patient has) (Capriotti and Frizzell, 2016).**
Mag	**1.5-2.6 mg/ dL**	**1.1**	**1.7**	**Magnesium was low due to hypomagnesemia (Capriotti and Frizzell, 2016).**
Phosphate	**2.5-4.5 mg/ dL**			
Bilirubin	**0.2-0.8 mg/ dL**			
Alk Phos	**32-104 U/L**	**93**	**93**	
AST	**10-40**	**23**	**23**	
ALT	**10-30**	**16**	**16**	
Amylase	**23-85 u/L**			
Lipase	**12-70 u/L**			
Lactic Acid	**0.5-1 mmol/ L**			

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	**0.8-1.4**			
PT	**10.1-13.1 sec**			
PTT	**25-36 sec**			
D-Dimer	**<0.5**	**1880**		**A positive D-Dimer can be an indication of a PE or a coagulation disorder (Capriotti and Frizzell, 2016).**
BNP	**<100 pg/mL**	**464**		**Smoking and pre-existing conditions can cause high levels of BNP (Capriotti and Frizzell, 2016).**
HDL	**>60 mg/dL**			
LDL	**<100 mg/dL**			
Cholesterol	**<200 mg/dL**			
Triglycerides	**<150 mg/dL**			
Hgb A1c	**<7%**			
TSH	**0.4-4.0 mu/L**			

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**	**Yellow**		
pH	**4.2-8.0**	**7.00**		
Specific Gravity	**1.005-1.030**	**1.015**		
Glucose	**Negative**	**100**		**Glucose in the urine can occur when patient has type II diabetes (Capriotti and Frizzell, 2016).**
Protein	**0-8 mg/dL**	**Normal**		
Ketones	**Negative**	**negative**		
WBC	**0-4**	**na**		
RBC	**0-2**	**positive**		**Blood in urine can occur when**

				patient has type II diabetes (Capriotti and Frizzell, 2016).
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**			
Blood Culture	**Negative**			
Sputum Culture	**Negative**			
Stool Culture	**Negative**			

Lab Correlations Reference (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Troponin- patient level was 0.02. Normal range is 0-0.4.

An ABG was ran on the patient and abnormal levels were indicated. Patients' Blood gases could be abnormal as a result of her COPD (Capriotti and Frizzell, 2016).

Diagnostic Test Correlation (5 points): Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis Company.

Diagnostic Test Reference (APA):

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

Home Medications (5 required)

Brand/ Generic	**Norvasc/ Amlodipine**	**Albuterol sulfate**	**Lasix/ Furosemide**	**Novolin insulin**	**Plavix/ Clopidogrel**
Dose	**10mg**	**1.25 mg/3ml**	**40mg**	**50 Units**	**75mg**
Frequency	**1 tablet every day for 90 days**	**1 vial 3X daily**	**1 tablet every day for 30 days**	**2X daily**	**1 tablet daily**

Route	**orally**	**orally**	**orally**	**Subcutaneous injection.**	**orally**
Classification	**Calcium channel blocker, antihypertensive.**	**Adrenergic, Bronchodilator.**	**Loop diuretic, Antihypersensitive.**	**Antidiabetics, Hormones.**	**Platelet inhibitor, platelet aggregation inhibitor.**
Mechanism of Action	**Binds to dihydropyridine and nondihydropyridine cell membrane receptor sites on myocardial and vascular smooth muscle cells and inhibits influx of extracellular calcium ions across slow calcium channels.**	**Attaches to beta2 receptors on bronchial cell membranes, which stimulates the intracellular enzyme adenylate cyclase to convert ATP to cyclic adenosine monophosphate.**	**Inhibits sodium and water reabsorption in the loop of Henle and increases urine formation.**	**Lowers blood glucose by: stimulating glucose uptake in skeletal muscle and fat, inhibiting Hepatic glucose production.**	**Binds to ADP receptors on the surface of activate platelets.**
Reason Client Taking	**Client taking for hypertension.**	**Client taking for COPD.**	**Client taking to reduce edema and hypertension.**	**Client is taking for her diabetes.**	**Client taking to treat her coronary atherosclerosis.**
Contraindications (2)	**Hypersensitivity to amlodipine or its components.**	**Hypersensitivity to albuterol or its components.**	**Anuria, hypersensitivity to furosemide or its components.**	**Hypoglycemia; Allergy or hypersensitivity to a particular type of insulin, preservatives, or other**	**Active pathological bleeding, Hypersensitivity to Clopidogrel or its components.**

				additives.	
Side Effects/Adverse Reactions (2)	**Arrhythmias, Pancreatitis.**	**Angina, Bronchospasm.**	**Arrhythmias, Thromboembolism.**	**Hypoglycemia, swelling.**	**Hypotension, Acute liver failure.**
Nursing Considerations (2)	**Use amlodipine cautiously in patients with heart block, heart failure, impaired renal function, hepatic disorder, or severe aortic stenosis. Monitor blood pressure while adjusting dosage, especially in patients with heart failure or severe aortic stenosis because symptomatic hypotension may occur.**	**Monitor serum potassium level because albuterol may cause transient hypokalemia. Be aware that drug tolerance can develop with prolonged use.**	**Be aware that patients who are allergic to sulfonamides may also be allergic to furosemide. Furosemide may precipitate nephrocalcinosis/nephrolithiasis in premature infants.**	**Emphasize the importance of compliance with nutritional guidelines and regular Exercise as directed by health care professional. Demonstrate technique for mixing insulins by drawing up regular insulin first and rolling intermediate-acting insulin vial between palms to mix, rather**	**Expect to give aspirin with clopidogrel in patient with acute coronary syndrome. Monitor patient who takes aspirin closely because risk of bleeding is increased.**

				than shaking (may cause inaccurate dose).	

Hospital Medications (5 required)

Brand/Generic	**Toradol/ Keterolac**	**0.9% sodium chloride**	**NA**	**NA**	**NA**
Dose	**15mg**	**30ml/hr**			
Frequency	**PRN**	**continuous**			
Route	**IV push**	**IV**			
Classification	**NSAID, Analgesic.**	**mineral and electrolyte replacements/supplements**			
Mechanism of Action	**Blocks cyclooxygenase, an enzyme needed to synthesize prostaglandins.**	**Sodium is a major cation in extracellular fluid and helps maintain water distribution, fluid and electrolyte balance, acid-base equilibrium, and osmotic pressure.**			
Reason Client Taking	**Client taking for pain.**	**Client taking to replenish electrolytes.**			
Contraindications (2)	**Advanced renal impairment, GI perforation.**	**Hypertonic (3%, 5%) solutions should not be used in patients with**			

		elevated, slightly decreased, or normal serum sodium; Fluid retention or hypernatremia.			
Side Effects/Adverse Reactions (2)	**Seizures, Acute pancreatitis.**	**Pulmonary edema, Hypernatremia.**			
Nursing Considerations (2)	**Be aware that NSAIDS like ketorolac should be avoided in patients with a recent MI because risk of reinfarction increases with NSAID therapy. Know that the risk of heart failure increases with ketorolac use because drug is a NSAID.**	**Assess fluid balance (intake and output, daily weight, edema, lung sounds) throughout therapy. Monitor serum osmolarity in patients receiving hypertonic saline solutions.**			

Medications Reference (APA):

Jones & Bartless Learning. (2020). *2020 Nurse's drug handbook* (19th ed.). Burlington, MA.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Pt is alert and oriented X3** **Pt was in pain but was administered medication but soon relieved.** **Overall appearance is good.**
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	**Skin is white and moist.** **Warm.** **Normal turgor: 2+** **No rashes** **No bruises** **No wounds** **Braden score- 16 (mild risk)**
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Pt's head is symmetrical.** **ears clear and pink-no discharge** **eyes are symmetrical and responded to light** **No nasal deviation** **Teeth in good condition.**
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:**	**S1 and S2 heart sounds present** **Cardiac rhythm is normal** **Peripheral pulses:2+ symmetric** **Capillary refill: less than 3 seconds** **No sign of edema**
RESPIRATORY (2 points):	**Breath sounds are slightly labored due to**

Accessory muscle use: Y☐ N ☒ **Breath Sounds: Location, character**	**COPD and pneumonia.**
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:10** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Patient is on a heart healthy diet at home.** **Active bowel sounds in all 4 quadrants.** **Pt had a bowel movement at 09:00 after her breakfast.** **Pt. experiencing slight pain in the stomach area around surgical site.** **Incision site looks good.**
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Clear, yellow.** **Voids regularly.**
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 30** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	. Pt. has full ROM and is in good physical condition. Pt uses cane and a walker PRN and walks well.

NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. Pt moves all extremities well Pupils equal, round, and reactive to light Complete orientation Mental status is excellent Speech is excellent **Good sensory- No hearing aids, no glasses.** **Patient is conscious and sitting up in a chair.**
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):**	Pt lives at home with spouse and typically smokes—but just recently quit. Pt is mature Christian

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
07:40	**90**	**LA 156/67**	**24**	**97.8 oral**	**93%** **3.5 L/min** **nasal cannula**
09:00	**87**	**LA 158/67**	**24**	**97.8 oral**	**93%** **3.5 L/min** **nasal cannula**

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
07:40	**0-10**	**Stomach**	**5**	**Irritating, cramping**	**15mg Ketorolac**
09:00	**0-10**	**Stomach**	**2**	**Slight cramping**	**NA**

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:**	22 Right hand 8-31-2020 0.9% sodium chloride 30ml/hr Ketorolac 15 mg PRN IV looks good, no bruising or erythema.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
1890ml	**5050ml**

Nursing Care

Summary of Care (2 points)

Overview of care: Patient is on 3.5 l/hr. O2 per nasal cannula and oxygen was 93%. Patient has type II diabetes and requires accu-checks. The patient rated her pain a 5 on a 0-10 scale and 15 mg of Ketorolac was given which reduced pain to a 2. Patient can ambulate independently with a cane or a walker. Patient gets blood work done daily because of her pneumonia, diabetes, and COPD.

Procedures/testing done: Patient had a cecal mass removed prior to admission. Once admitted, patient had a D-dimer, a CBC, CMP, Troponin, and BNP ran. The D-dimer and BNP was positive. CBC and CMP showed some abnormalities.

Complaints/Issues: Stomach pain.

Vital signs (stable/unstable): Stable vital signs.

Tolerating diet, activity, etc.: Patient tolerating diet and is ambulating independently with a walker/cane.

Physician notifications: Patient is to see lung doctor.

Future plans for patient: The patient is to stop smoking (for good) to control COPD, and to see her lung specialist.

Discharge Planning (2 points)

Discharge location: Patient is going to her home with her husband.

Home health needs (if applicable): Patient will be on oxygen once home.

Equipment needs (if applicable): A cane daily, and a walker PRN.

Follow up plan: Patient will see her lung specialist.

Education needs: Patient recently quit smoking so smoking education may be needed. Patient has just had surgery on her stomach so caring for her surgical site may need to be taught.

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. Disruption of gas exchange due	**Patient presented with a**	**1. Administer O2 per nasal cannula.**	**The patient is willing to change positions and**

to altered oxygen supply as evidence by pneumonia, COPD and dyspnea.	**02 level of 86% upon admission and was having trouble breathing.**	**2. Reposition patient when dyspnea occurs.**	**receive O2. Goal: Increase patients O2 levels. Outcomes: Patients O2 levels increased from 86% to 93%.**
1. Risk of infection due to chronic conditions as evidence by recurring pneumonia.	**Patient was diagnosed with pneumonia after admission. Patient has had pneumonia frequently.**	**1. Administer antibiotics for infection. 2. Have patient get the flu and pneumococcal vaccine annually.**	**The patient is willing to receive antibiotics and willing to receive annual vaccines. Goal: treat infection and help prevent future infections. Outcomes: Patients lungs look better and infection is getting better.**
1. Difficultly to stay healthy related to lifestyle choices as evidence by chronic conditions.	**Patient has COPD, frequent pneumonia, and heart issues and has just quit smoking.**	**1. Encourage cessation of smoking. 2**.Have patients husband help stay off of smoking.	**The patient and her spouse are willing to try and stay off of smoking to manage her COPD. Goal: manage patient's conditions. Outcome: patient has not smoked in a little over a month and is on a nicotine patch.**

Other References (APA):

Swearingen, P. L., & Wright, J. D. (2020). ***All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*****. St. Louis, MO: Elsevier.**

Concept Map (20 Points):

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Subjective Data

Patient said “I feel better today than I have since I’ve been here”.
Patient is feeling some pain (5 on a 0-10 scale).
Patient states “Pain medication brings my pain down to a 2”.
The patient states that she does not drink and has smoked for 35-40 years but has recently quit and plans to keep it that way.

Nursing Diagnosis/Outcomes

1. Disruption of gas exchange due to altered oxygen supply as evidence of pneumonia, COPD, and dyspnea
Outcome: Patients O2 levels increased from 86% to 93%.
2. Risk of infection due to chronic conditions as evidence by recurring pneumonia. Outcome: Patients lungs look better and infection is getting better. Patient agrees to get annual vaccines.
3. Difficultly to stay healthy related to lifestyle choices as evidence by chronic conditions. Outcomes: patient has not smoked in a little over a month and is on a nicotine patch.

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Objective Data

Height: 5 feet 4 inches
Weight: 158 pounds

VITAL SIGNS:
Pulse- 90
BP- LA 156/67
Resp rate 24
Temp- oral 97.8
O2- 93% with 3.5 l/min nasal cannula.
X-ray shows lungs to be cleared up from pneumonia.

Patient Information

Patient is a 64-year-old admitted On 8-27-2020 after a scheduled excision of Colon-cecal mass surgery.
Pt has pneumonia & is on antibiotics.
Full code
Allergies include: Bactrim- rash and Erythromycin base-hives

Nursing Interventions

1. -Administer O2 per nasal cannula.
- Reposition patient when dyspnea occurs

2. Administer antibiotics for infection.

2.Have patient get the flu and pneumococcal vaccine annually.

3. Encourage cessation of smoking.

2.Have patients husband help stay off of smoking.

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