

Unfolding Clinical Reasoning Case Study:

Pneumonia/COPD Content/Concept Map

I. Content

Anatomy/Physiology:	Pneumonia COPD Sepsis
Pharmacology:	<p>Home Meds:</p> <ol style="list-style-type: none"> 1. Fluticasone/salmeterol (Advair) diskus 1 puff every 12 hours 2. Albuterol (Ventolin) MDI 2 puffs every 4 hours prn 3. Lisinopril (Prinivil) 10 mg po daily 4. Gemfibrozil (Lopid) 600 mg po bid 5. Diazepam (Valium) 2.5 mg po every 6 hours as needed 6. Triamterene-HCTZ (Dyazide) 1 tab daily <p>Medical Management:</p> <ol style="list-style-type: none"> 1. albuterol-ipratropium (Combivent) 2.5 mg neb 2. lorazepam (Ativan) 1 mg IV push 3. methylprednisolone (Solumedrol) 125 mg IV push 4. levofloxacin (Levaquin) 750 mg IVPB (after blood cultures drawn) 5. acetaminophen (Tylenol) 1000mg oral
Diagnostic/Labs:	12 lead EKG: sinus tachycardia Chest x-ray CBC BMP Lactate

	Arterial blood gas Blood culture Sputum culture UA/UC
Dosage Calculation:	1. Methylprednisolone (Solumedrol) 125 mg IV push (125 mg/2 mL vial) 2. Lorazepam (Ativan) 1 mg IV push (2 mg/1 mL vial) 3. levofloxacin (Levaquin) 750 mg IVPB (150 mL volume) 150 mL over 90 minutes
Nursing Priorities:	<i>IMPAIRED GAS EXCHANGE</i> <i>INEFFECTIVE AIRWAY CLEARANCE</i> <i>ALTERED BODY TEMPERATURE</i>
Priority Setting: Which orders do you implement first and why?	1. Albuterol-ipratropium (Combivent) 2.5 mg neb 2. Establish peripheral IV 3. Lorazepam (Ativan) 1 mg IV push 4. Methylprednisolone (Solumedrol) 125 mg IV push 5. Levofloxacin (Levaquin) 750 mg IVPB (after blood cultures drawn) Acetaminophen (Tylenol) 1000mg oral
Patient Education & Discharge Planning:	1. <i>Pursed lip breathing</i> 2. <i>Signs of COPD exacerbation and when she should come to the ED for evaluation</i> 3. <i>Review action/indications for use of all relevant medications, especially her inhalers</i>
	4. <i>Proper use of spacers or other devices to optimize inhalation of metered dose inhalers (MDI) in the lungs</i>

II. Concepts (in order of emphasis)

- I. Gas Exchange
- II. Infection
- III. Acid-Base Balance

- IV. Thermoregulation
- V. Clinical Judgment
- VI. Pain
- VII. Patient Education
- VIII. Communication
- IX. Collaboration

III. NCLEX Client Need Categories

I. Safe and Effective Care Environment

a. 20%—Management of Care

- i. Providing and directing nursing care that enhances the care delivery setting to protect clients, family/significant others, and healthcare personnel
 - 1. Establish priorities
 - 2. Collaboration w/treatment team
 - 3. Advocacy

II. Health Promotion & Maintenance:

- i. 9%—The nurse provides and directs nursing care of the client and family/significant others that incorporates knowledge of expected growth and development principles, prevention and/or early detection of health problems, and strategies to achieve optimal health.
 - 1. Disease prevention
 - 2. Physical assessment
 - 3. Client education

III. Psychosocial Integrity:

- i. 9%—Nurse provides care that promotes and supports the emotional, mental, and social well-being of the patient and family who are experiencing stressful events.
 - 1. Coping mechanisms
 - 2. Therapeutic communication
 - 3. End of life care

IV. Physiologic Integrity

- a. 15%–Pharmacological & Parenteral Therapies:
 - i. Providing care related to the administration of medications and parenteral therapies
 - 1. Expected actions, adverse/side effects
 - 2. Medication administration
 - 3. IV therapies
 - 4. Dosage calculation

- b. 12%–Reduction of Risk Potential:
 - i. Reducing the likelihood that clients will develop complications or health problems related to existing conditions, treatments or procedures
 - 1. Changes in VS
 - 2. Diagnostic tests
 - 3. Lab values
 - 4. System specific assessments
 - 5. Potential for alterations in body systems

- c. 13%–Physiological Adaptation:
 - i. Managing and providing care for clients with acute, chronic, or life threatening health conditions.
 - 1. Pathophysiology
 - 2. F&E imbalances
 - 3. Medical emergencies

IV. QSEN Skills

I. Patient-centered Care

- a. Implementation of care plan and evaluation of care
- b. Provide patient-centered care with sensitivity and respect for the diversity of human experience

- c. Assess presence and extent of pain and suffering. Assess levels of physical and emotional comfort
- d. Elicit expectations of patient & family for relief of pain, discomfort, or suffering
- e. Initiate effective treatments to relieve pain and suffering in light of patient values, preferences and expressed needs

II. Evidence-based Practice

- a. Base individualized care plan on patient values, clinical expertise and evidence

III. Teamwork and Collaboration

- a. Follow communication practices that minimize risks associated with handoffs among providers and across transitions in care (SBAR). Assert own position/perspective in discussions about patient care