ing if there is no purse-string suture around the insertion site to prevent air from entering the chest. Generally, the primary care provider performs the removal but, in some areas, specially trained nurses may be permitted to do so.

Evaluating
Using the goals and desired outcomes identified in the planning stage of the nursing process, the nurse collects data to evaluate the effectiveness of interventions. If outcomes are not achieved, the nurse, client, and support person if appropriate need to explore the reasons before modifying the care plan. For example, if the outcome “Respirations unlabored and rate is within expected range” is not met, examples of questions that need to be considered include the following:

- What is the client’s perception of the problem?
- Is the client complaining of shortness of breath or difficulty breathing?

Is the client taking medications or performing treatments such as percussion, vibration, and postural drainage as prescribed?
- Has the client been exposed to an upper respiratory infection that is affecting breathing?
- Do other factors need to be considered, such as the client’s psychologic stress level?

Examples of questions to consider if the outcome “Able to complete ADLs without fatigue” is not met include the following:

- What other factors may be affecting the client’s ability to complete ADLs?
- Is the client getting adequate sleep? If not, what is interfering with the client’s rest?
- Are there assistive devices (e.g., a shower chair, clothing that is easy to put on) that could help the client achieve this goal?
- Does the client need help with housework and other ADLs?
- Is the client’s diet adequate to meet nutritional needs?

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**NURSING CARE PLAN**

**For Ineffective Airway Clearance**

**ASSESSMENT DATA**

**Nursing Assessment**
Johit Singh is a 39-year-old secretary who was admitted to the hospital with an elevated temperature, fatigue, rapid, labored respirations; and mild dehydration. The nursing history reveals that Ms. Singh has had a “bad cold” for several weeks that just wouldn’t go away. She has been dieting for several months and skipping meals. Ms. Singh mentions that in addition to her full-time job as a secretary she is attending college classes two evenings a week. She has smoked one package of cigarettes per day since she was 18 years old. Chest x-ray confirms pneumonia.

**Physical Examination**
- Height: 167.6 cm (5’6”)
- Weight: 54.4 kg (120 lb)
- Temperature: 39.4°C (103°F)
- Pulse: 68 BPM
- Respirations: 24/minute
- Blood pressure: 118/70 mm Hg
- Skin pale; cheeks flushed; chills; use of accessory muscles; inspiratory crackles with diminished breath sounds right base; expectorating thick, yellow sputum

**Diagnostic Data**
- Chest x-ray: right lobar infiltration
- WBC: 14,000
- pH: 7.49
- PaCO₂: 33 mm Hg
- HCO₃⁻: 20 mEq/L
- PaO₂: 80 mm Hg
- O₂ sat: 88%

**NURSING DIAGNOSIS**

Ineffective Airway Clearance related to thick sputum, secondary to pneumonia (as evidenced by rapid respirations, diminished and adventitious breath sounds, thick yellow sputum)

**DESIRED OUTCOMES**

Respiratory Status: Airway Patency [0410] as evidenced by not compromised
- Respiratory rate
- Moves sputum out of airway
- No adventitious breath sounds

**NURSING INTERVENTIONS***/SELECTED ACTIVITIES**

**Cough Enhancement [3250]**

Assist Ms. Singh to a sitting position with head slightly flexed, shoulders relaxed, and knees flexed. Lying flat causes the abdominal organs to shift toward the chest, crowding the lungs and making it more difficult to breathe.
UNIT X / Promoting Physiologic Health

APPLYING CRITICAL THINKING

1. What factors may have led the medical staff to suspect that Ms. Singh had more than a very bad cold? Would you have come to the same conclusion?
2. The care plan appropriately focuses on the acute care of this client. Once she is significantly improved, the nurse will perform discharge teaching. What areas should be included?
3. The client already has some signs of respiratory distress. What signs might indicate that her condition was deteriorating into a more emergency situation? How would you handle this?
4. It appears that the client’s sputum has not been cultured. In caring for this client, what infection control guidelines would be needed?
5. Ms. Singh’s oxygen order is for a face mask at 6 L/minute. She repeatedly pulls it off and you find it lying in the sheets. How might you intervene?

See Critical Thinking Possibilities in Appendix A.