

NP Practice Test

1. A 40-year-old female hospitalized for severe exacerbation of asthma has been treated for 6 days with albuterol by small volume nebulizer, oral theophylline, and IV methylprednisolone. The patient's blood gases have stabilized. When discontinuing the IV steroid in preparation for discharge, the acute care nurse practitioner should order:
 - a. Inhaled steroid, such as Azmacort, only
 - b. Oral prednisone 20 mg daily for one week and then Azmacort
 - c. Oral prednisone in decreasing doses
 - d. Oral prednisone in decreasing doses and inhaled steroid, such as Azmacort
2. A patient states, "This treatment is too much trouble." Which of the following is the best example of therapeutic communication?
 - a. "I agree with you."
 - b. "You think the treatment isn't helping you?"
 - c. "You should trust the doctor."
 - d. "Don't worry. Everything will be fine."
3. A patient who receives multiple transfusions with citrated blood products must be monitored closely for:
 - a. Hyponatremia
 - b. Hypomagnesemia
 - c. Hypokalemia
 - d. Hypocalcemia
4. Which of the following arterial blood gas (ABG) findings is consistent with metabolic acidosis in an adult?
 - a. $\text{HCO}_3^- < 22 \text{ mEq/L}$ and $\text{pH} < 7.35$
 - b. $\text{HCO}_3^- > 26 \text{ mEq/L}$ and $\text{pH} > 7.45$
 - c. $\text{PaCO}_2 35\text{--}45 \text{ mm Hg}$ and $\text{PaO}_2 \geq 80 \text{ mm Hg}$
 - d. $\text{PaCO}_2 > 55 \text{ mm Hg}$ and $\text{PaO}_2 < 60$
5. When irrigating a wound, what wound irrigation pressure is needed to effectively cleanse the wound while avoiding trauma?
 - a. $< 4 \text{ psi}$
 - b. $20\text{--}30 \text{ psi}$
 - c. $10\text{--}15 \text{ psi}$
 - d. $> 15 \text{ psi}$
6. A patient has chest pain, dyspnea, and hypotension. A 12-lead ECG shows atrial rates of 250 with regular ventricular rates of 100. P waves are saw-toothed (referred to as F waves), QRS shape and duration (0.04 to 0.11 seconds) is normal, PR interval is hard to calculate because of F waves, and the P:QRS ratio is 2–4:1. Which of the following diagnoses fits this profile?
 - a. Premature atrial contraction
 - b. Premature junctional contraction
 - c. Atrial fibrillation
 - d. Atrial flutter

7. A 44-year-old obese woman recovering from a femoropopliteal bypass develops sudden onset of dyspnea with chest pain on inspiration, cough, and fever of 39°C. An S₄ gallop rhythm is present. The ECG shows tachycardia and nonspecific changes in ST and T waves. The most likely diagnosis is:

- a. Myocardial infarction
- b. Pulmonary embolism
- c. Pneumonia
- d. Sepsis

8. Which of the following is the correct procedure to evaluate the function of cranial nerve X (vagus)?

- a. Ask the patient to protrude the tongue and move it from side to side against a tongue depressor
- b. Observe patient swallowing, and place sugar or salt at back third of tongue to determine if patient can differentiate
- c. Ask patient to swallow and speak, and place tongue blade on posterior tongue or pharynx to elicit gag reflex
- d. Place hands on patient's shoulders and ask the patient to shrug against resistance

9. In Erikson's psychosocial model of development, which stage is typical of those entering young adulthood?

- a. Identity vs role confusion
- b. Initiative vs guilt
- c. Ego integrity vs despair
- d. Intimacy vs isolation

10. Which of the following is a violation of professional boundaries on the part of the acute care nurse practitioner?

- a. A nurse practitioner accepts a box of chocolates to be shared by all unit staff from a patient's daughter
- b. The nurse practitioner confides to the patient that he, like the patient, is getting a divorce, so he understands the patient's stress
- c. The nurse practitioner assists a patient in placing a call to his landlord so the patient can explain that he cannot pay the rent on time
- d. The nurse practitioner finds a patient crying and places his hand on the patient's shoulder

11. Using the average cost of a problem and the cost of intervention to demonstrate savings is:

- a. A cost-benefit analysis
- b. An efficacy study
- c. A product evaluation
- d. A cost-effectiveness analysis

12. A legal document that specifically designates someone to make decisions regarding medical and end-of-life care if a patient is mentally incompetent is a(n):

- a. Advance directive
- b. Do not resuscitate order
- c. Durable power of attorney
- d. General power of attorney

Answer Key and Explanations

1. D: Patients receiving oral or intravenous steroids should be prescribed oral prednisone in decreasing doses while initiating inhaled steroids. Severe episodes of asthma may occur with withdrawal of oral or IV steroids when switching to inhaled aerosol, so combining inhaled treatment with decreasing doses can help prevent adrenal suppression, which results in acute exacerbation of symptoms. Patients should use a metered-dose inhaler (MDI) with a reservoir device or a formulation with a spacing tube (such as Azmacort) and rinse the mouth thoroughly after inhaling to prevent thrush.

2. B: “You think the treatment isn’t helping you?” is a verbal expression of an implied message. The topic should be explored while allowing the patient to terminate the discussion without probing: “I’d like to hear how you feel about that.” Agreeing with rather than accepting and responding to the patient’s statements can make it difficult for the patient to change his/her statement or opinion later. The nurse should avoid giving advice with “should” statements. Meaningless clichés, such as “Don’t worry,” can block effective communication.

3. D: Patients who receive multiple transfusions with citrated blood products must be carefully monitored for hypocalcemia. Calcium is important for transmitting nerve impulses and regulating muscle contraction and relaxation, including the myocardium. Calcium activates enzymes that stimulate chemical reactions and has a role in coagulation of blood. Values include:

- Normal values: 8.2 to 10.2 mg/dL.
- Hypocalcemia: <8.2 mg/dL. Critical value: <7 mg/dL.
- Hypercalcemia: >10.2 mg/dL. Critical value: >12 mg/dL.

Symptoms include tetany, tingling, seizures, altered mental status, and ventricular tachycardia. Treatment is calcium replacement and vitamin D.

4. A: $\text{HCO}_3^- < 22 \text{ mEq/L}$ and $\text{pH} < 7.35$ are consistent with metabolic acidosis, which may result from severe diarrhea, starvation, DKA, kidney failure, and aspirin toxicity. Symptoms may include headache, altered consciousness, agitation, lethargy, and coma. Cardiac dysrhythmias and Kussmaul respiration are common. Other readings:

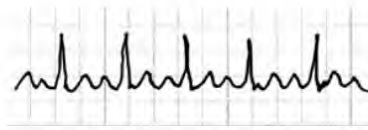
- $\text{HCO}_3^- > 26 \text{ mEq/L}$ and $\text{pH} > 7.45$ are consistent with metabolic alkalosis.

PaCO_2 35–45 mm Hg and $\text{PaO}_2 \geq 80 \text{ mm Hg}$ are normal adult readings.

D. $\text{PaCO}_2 > 55 \text{ mm Hg}$ and $\text{PaO}_2 < 60$ are consistent with acute respiratory failure in a previously healthy adult.

5. C: Wounds should be irrigated with pressures of 10 to 15 psi. An irrigation pressure of <4 psi does not adequately cleanse a wound, and pressures >15 psi can result in trauma to the wound, interfering with healing. A mechanical irrigation device is more effective for irrigation than a bulb syringe, which delivers about ≤ 2 psi. A 250 mL squeeze bottle supplies about 4.5 psi, adequate for low-pressure cleaning. A 35-mL syringe with a 19-gauge needle provides about 8 psi.

6. D:



Atrial flutter (AF) occurs when the atrial rate is faster (usually 250–400 beats per minute) than the atrioventricular (AV) node conduction rate so not all of the beats are conducted into the ventricles (ventricular rate 75–150). The beats are effectively blocked at the AV node, preventing ventricular fibrillation although some extra ventricular impulses may go through. AF is caused by the same conditions that cause atrial fibrillation: coronary artery disease, valvular disease, pulmonary disease, heavy alcohol ingestion, and cardiac surgery. Treatment includes:

- Cardioversion if condition is unstable.
- Medications to slow ventricular rate and conduction through AV node: Cardizem®, Calan®.
- Medications to convert to sinus rhythm: Corvert®, Cardioquin®, Norpace®, Cordarone®.

7. B: Although symptoms of pulmonary embolism may vary widely depending on the size and location of the embolus, dyspnea, inspirational chest pain, cough, fever, S4 sound, tachycardia, and non-specific ECG changes in ST and T waves are common. Risk factors include obesity, recent surgery, history of deep vein thrombosis, and inactivity. Treatment includes oxygen, IV fluids, dobutamine for hypotension, analgesia for anxiety, and medications as indicated (digitalis, diuretic, antiarrhythmic). Intubation and mechanical ventilation may be required. Percutaneous filter may be placed in the inferior vena cava to prevent more emboli from reaching lungs.

8. C: To evaluate cranial nerve X (vagus), ask the patient to swallow and speak, observing for difficulty swallowing or hoarseness, and stimulate the back of the tongue or pharynx to elicit the gag reflex. Other examinations include:

- Cranial nerve IX (glossopharyngeal): Observe patient swallowing, and place sugar or salt at back third of tongue to determine if patient can differentiate between them
- Cranial nerve XI (spinal accessory): Place hands on patient's shoulders and ask the patient to shrug against resistance
- Cranial nerve XII (hypoglossal): Ask the patient to protrude the tongue and move it from side to side against a tongue depressor

9. D: Erikson's psychosocial development model focuses on conflicts at each stage of the lifespan and the virtue that results from finding balance in the conflict. The first 5 stages refer to infancy and childhood and the last 3 stages to adulthood:

- Intimacy vs isolation (young adulthood): Love/intimacy or lack of close relationships
- Generativity vs stagnation (middle age): Caring and achievements or stagnation
- Ego integrity vs despair (older adulthood): Acceptance and wisdom or failure to accept changes of aging/despair

10. B: The nurse should not disclose personal information, such as an impending divorce, because this establishes a social relationship that interferes with the professional role of the nurse. Small tokens of appreciation that can be shared with other staff, such as a box of chocolates, are usually acceptable (depending upon the policy of the institution), but almost any other gifts (jewelry, money, clothes) should be declined. Assisting a patient to place a phone call is not a boundary issue.

Touching should be used with care, such as touching a hand or shoulder. Hugging may be misconstrued.

11. A: A cost-benefit analysis uses average cost of a problem (such as wound infections) and the cost of intervention to demonstrate savings. For example, if a surgical unit averaged 10 surgical site infections annually at an additional average cost of \$27,000 each, the total annual cost would be \$270,000. If the total cost for interventions (new staff person, benefits, education, and software) totals \$92,000, and the goal is to reduce infections by 50% (5 X \$27,000 for a total projected savings of \$135,000), cost benefit is demonstrated by subtracting the intervention costs from the proposed savings (\$135,000 - \$92,000) for a savings of \$43,000 annually.

12. C: The legal document that designates someone to make decisions regarding medical and end-of-life care if a patient is mentally incompetent is a durable power of attorney. This is a type of advance directive, which can include living wills or specific requests of the patient regarding treatment. A do not resuscitate order indicates the patient does not want resuscitative treatment for terminal illness or condition. A general power of attorney allows a designated person to make decisions for a person over broader areas, including finances.

13. C: Hemoglobin A1C of 5.5% most indicates dietary compliance. Hemoglobin A1C comprises hemoglobin A with a glucose molecule because hemoglobin holds onto excess blood glucose, so it shows the average blood glucose levels over a 3-month period and is used primarily to monitor long-term diabetic therapy. Normal value: <6% and elevation >7%. Fasting blood sugar (FBS) results can vary widely but show current serum level, so a person who stays on a diet for a few days and fasts may show a near-normal FBS for a short period even though the patient is frequently non-compliant. Normal FBS: 70–99 mg/dL.

14. D: While all of these characteristics are important for team members, central to collaboration is the willingness to compromise. In addition, members must be able to communicate clearly, which encompasses assertiveness, patience, and empathy. Teams should identify specific challenges and problems and then focus on the task of reaching a solution. Collaboration is needed in order to move nursing forward. Nurses must take an active role in gathering data for evidence-based practice to support nursing's role in health care and must share this information with other nurses and health professionals.

15. A: These symptoms are consistent with fat embolism syndrome (FES), which may cause rapid acute pulmonary edema and ARDS, so the patient should be immediately provided with high-flow oxygen. Controlled-volume ventilation with positive end-expiratory pressure (PEEP) may be indicated to prevent/treat pulmonary edema. Corticosteroids may reduce inflammation of the lungs and reduce cerebral edema. Vasopressors prevent hypotension and interstitial pulmonary edema. Morphine with a benzodiazepine may be indicated for patients who require artificial ventilation.

16. C: Justice is the ethical principle that relates to the distribution of the limited resources of healthcare benefits to the members of society. These resources must be distributed fairly. This issue may arise if there is only one bed left and two sick patients. Justice comes into play in deciding which patient should stay and which should be transported or otherwise cared for. The decision should be made according to what is best or most just for the patients and not colored by personal bias.

17. B: Care should be taken to safeguard information and provide the privacy that the patient deserves. This is accomplished through the use of required passwords when family members call or ask for information. Confidentiality is the obligation that is present in a professional-patient