Detailed Answer Key
N433 Exam 3 Practice Questions

1. Which of the following actions should the nurse take? For each nursing action, click to specify if the action is indicated or contraindicated for the client.

   Answers cannot be displayed for this alternate item format.

   Rationale: **Provide 100% oxygen by face mask is indicated.** During a hypercyanotic spell, there is a decrease in pulmonary blood flow and an increase in right-to-left shunting of the blood in the heart. This results in hypoxia and acidosis. Prompt intervention is needed to correct the hypoxia and prevent brain damage and death. **Prepare to assist with the insertion of a chest tube is contraindicated.** Hypercyanotic spells are not related to a pneumothorax. They are caused by a spasm of the heart muscle below the pulmonary artery, which then results in obstruction of blood flow to the lungs and an increase in desaturated blood in the systemic circulatory system. **Place the infant in a knee-chest position is indicated.** Positioning the infant with their knees pulled up toward their chest reduces the return of desaturated venous blood from the legs and increases systemic vascular resistance. This results in an increased amount of blood flowing into the pulmonary arteries, which increases oxygenation. **Request a prescription for a diuretic is contraindicated.** Infants and children who have cyanotic heart defects are prone to developing polycythemia. The increased number of red blood cells increases the viscosity of the blood. It is essential to maintain adequate hydration to decrease the risk of a cerebral vascular accident occurring. **Perform nasopharyngeal suctioning for a maximum of 5 seconds is contraindicated.** There is no indication of a need to suction the nasopharynx. This action will likely result in agitating the infant, which will increase the severity of the hypercyanotic spell. The nurse should instead take actions to calm the infant. **Administer morphine via IV bolus is indicated.** Morphine can relax the spasms of the infundibular region in the heart, which is located below the pulmonary valve. This will relieve the obstruction and increase pulmonary blood flow.

2. Which of the following assessment findings at 1600 indicate that the expected outcomes have been met?Click to highlight the statements in the nurse's notes which show achievement of the expected outcomes. To deselect a statement, click on the statement again.

   Answers cannot be displayed for this alternate item format.

   Rationale: **Temperature 36.5°C (97.7°F) is correct. T**he child's temperature was 35.6°C (96°F) upon returning from the cardiac catheterization. This value is below the expected reference range of 36-38°C (96.8-100.4°F) . The child's temperature has increased to the expected range. **Right groin pressure dressing is intact and has a small amount of dried blood on the dressing is correct. T**he nurse is assessing the c site dressing to note for bleeding. The dressing should also remain occlusive to maintain pressure to cannulization site to prevent bleeding and to prevent contamination of the site. This statement shows the bleeding has not increased and the outcome has been met. **Right leg is warm to touch and equal in color to the left leg is correct.** This assessment shows the outcome is achieved. The nurse assesses the color and temperature of the affected leg to determine if there is any arterial or venous obstruction. The outcome is to have the affected leg return to pre-catheterization assessment. **Pedal and popliteal pulses strong and equal in bilateral lower extremities is correct.** This assessment shows the outcome is achieved. The nurse assesses the presence and strength of the pulses in the lower extremities of the affected leg to determine if there is an arterial obstruction. The outcome is to have the affected leg return to pre-catheterization assessment **Apical heart rate is strong and regular is correct.** This assessment shows the outcome is achieved. During a catheterization a complication may include injury to a heart vessel or valve. Blood may collect in the pericardial space which would cause the apical heart rate to sound distant or faint. Another complication the nurse assess for is dysrhythmias or bradycardia. **Child continues refusing PO fluids is incorrect.** An outcome that should be met is that the child will be able to maintain adequate oral fluid intake. Children undergoing a cardiac

catheterization are at risk for dehydration due to pre-procedure NPO, procedural dyes or contrast material and blood loss. **Child reports pain at the right groin is a 4 on the Faces Pain Rating scale is incorrect.** The outcome of pain management has not been met. Discomfort at the cannulation site should be treated with the administration of acetaminophen or ibuprofen.

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3. Which of the following actions should the nurse plan to take based on the most recent assessment findings?

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Rationale: **Instruct the guardians to not provide food or fluids to the toddler is correct.** Children who are experiencing severe respiratory distress should be NPO to decrease the risk of aspiration. **Administer nebulized racemic epinephrine is correct.** This medication rapidly causes mucosal vasoconstriction and decreased subglottic edema. Its use is indicated for moderate to severe cases of acute laryngotracheobronchitis.**Provide blow-by oxygen with cool mist is correct.** The toddler's respiratory effort indicates a need for supplemental oxygen. A face mask can be frightening for a young child and crying increases respiratory distress. Blow-by oxygen with cool mist can provide supplemental oxygen in a non-threatening way and assist to induce vasoconstriction of the oral and subglottic tissues and reduce edema.**Visualize the upper airway using a light source is incorrect.** This action could be appropriate when caring for a toddler who has pharyngitis or suspected epiglottis. However, acute laryngotracheobronchitis causes inflammation of the larynx and trachea.**Ensure intubation equipment is accessible is correct.** The toddler has manifestations of severe respiratory distress, which could progress to respiratory failure. The nurse should plan to ensure that intubation equipment and bag and valve mask equipment are readily available.**Administer decongestant nose drops is incorrect.** Decongestant nose drops are indicated for children who have nasopharyngitis and are at least 6 years of age. **Encourage the guardians to hold the toddler is correct.** Crying increases respiratory distress. Encouraging the guardians to hold the toddler in an upright position will provide reassurance and help to calm the toddler.

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4. The nurse reviews the assessment findings and determines they are consistent with which of the following disease processes?**For each assessment finding, click to specify if the finding is consistent with acute viral nasopharyngitis, acute epiglottitis, or acute laryngotracheobronchitis. Each finding may support more than one disease process.**

Answers cannot be displayed for this alternate item format.

Rationale: **Body temperature is consistent with acute viral nasopharyngitis, acute epiglottitis, and acute laryngotracheobronchitis.** The child has a temperature of 38.3° C (101° F), which is consistent with all three disease processes. A fever is common for children who have acute viral nasopharyngitis. Older children typically have a lower grade temperature than younger children. Children who have acute epiglottitis have a high fever and can appear more ill than clinical manifestations suggest. Children who have acute laryngotracheobronchitis usually have a low-grade fever that has a gradual onset. **Child's appearance is consistent with acute epiglottitis.** The child suddenly appears very ill and does not respond to questions. The sudden respiratory obstruction rapidly leads to low oxygen and increased carbon dioxide levels in the blood stream, resulting in acidosis. Children who have acute viral nasopharyngitis or acute laryngotracheobronchitis do not appear severely ill. **Oral secretions are consistent with acute epiglottitis.** The child is observed to be sitting up and leaning forward with mouth open and drooling. These are typical manifestations of acute epiglottitis, not acute viral nasopharyngitis or acute laryngotracheobronchitis. **Retractions are consistent with acute epiglottitis and acute laryngotracheobronchitis.** The child has suprasternal retractions, which is a manifestation of acute

epiglottitis and acute laryngotracheobronchitis. Suprasternal retractions occur when narrowing of the airways increase the work of breathing and accessory muscles. **Positioning of body is consistent with acute epiglottitis.** The child is sitting up and leaning forward in the tripod position. This position is consistent with acute epiglottitis and assists to facilitate breathing. The tripod position is not consistent with acute viral nasopharyngitis or acute laryngotracheobronchitis. **Reported pain is consistent with acute epiglottitis.** The child's throat is sore and red with an inflamed epiglottis. These are typical manifestations of acute epiglottitis. Children who have acute viral nasopharyngitis can have an inflamed pharynx, but not to the degree of swelling and inflammation of children who have acute epiglottitis experience. Pain is not a characteristic of acute laryngotracheobronchitis.

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5. **Drag words from the choices below to fill in each blank in the following sentence.**

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Rationale: **Dehydration is correct.** The client has been running a low-grade fever and has not eaten for past 2 days, BUN and sodium are slightly above expected reference ranges. Increased BUN and sodium may be indicative of dehydration. Client also reports not having an appetite; all these manifestations place the client at risk for dehydration.**Anemia is incorrect.** The client's hemoglobin is slightly below the expected reference range, the hematocrit is within the expected reference range. There is no indication that the client is at risk for anemia.**Muscle cramps is incorrect.** The client's potassium is within the expected reference range. There is no indication in client's data collection that indication the client is at risk for developing muscle cramps.**Pleural effusion is correct.** The client has pneumonia with bilateral crackles auscultated in the lungs and chest x-ray indicates that the client has infiltrates and consolidation in the lungs.

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6. The nurse is aware the neonate's blood circulation is different before birth than after birth. Which circulation pattern does the nurse recognize as occurring prior to birth?

A. Oxygenated blood flows from the right atrium to the left atrium through the foramen ovale.

Rationale: This is correct. Prior to birth, oxygenated blood crosses from the right atrium to the left atrium via the patent foramen ovale (PFO) and is pumped by the left ventricle.

B. Oxygenated blood flows from the right ventricle to the lungs and then to the left ventricle.

Rationale: This is incorrect. Prior to birth, oxygenated blood does not flow from the right ventricle to the lungs and then to the left ventricle.

C. For a short time after birth, the neonate continues to depend on the mother for oxygen supply.

Rationale: This is incorrect. Before birth, 90% of blood bypasses the lungs; the placenta is the organ of respiration. After the cord is cut and the placenta is delivered, the infant is expected to independently breathe.

D. Once the neonate takes a first breath, the ductus venosus closes and blood goes to the lungs.

Rationale: This is incorrect. On birth and first breath, the foramen ovale and ductus arteriosus close.

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7. The nurse is caring for a 36-week gestation newborn who has a heart murmur, poor feeding, fatigue, and bounding pulses. The vital signs are temperature, 97.8°F (36.5°C); respirations, 62 breaths/min; heart rate, 158 beats/min; and blood pressure, 65/25 mm Hg. Which finding does the nurse recognize as being indicative of patent ductus arteriosus (PDA)?

   A. Heart rate of 158 beats/min

      Rationale: This in incorrect. The patient's heart rate is within normal range for a newborn (60–160 beats/min).

   B. Respiration rate of 62 breaths/min

      Rationale: This is incorrect. The normal respiration rate of a newborn ranges between 40 and 60; this is only slightly above the normal.

   C. Heart murmur

      Rationale: This is incorrect. Heart murmur is common sign of congenital heart defects, not PDA.

   D. Wide pulse pressure

      Rationale: This is correct. Wide pulse pressure is a clinical finding indicative of PDA. To determine pulse pressure, subtract 25 from 65; pulse pressure is 40.

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8. The nurse is preparing an 8-year-old patient for a cardiac catheterization. Which intervention will the nurse initiate **immediately** postprocedure?

   A. Observe for signs and symptoms of infection.

      Rationale: This is incorrect. It is not likely for the patient to develop an infection immediately following a cardiac catheterization.

   B. Hold food and fluids until gag reflex returns.

      Rationale: This is incorrect. The patient will receive a sedative before the procedure to reduce anxiety; a local anesthetic is used at the puncture site. Neither intervention is likely to cause an absent or depressed gag reflex.

   C. Keep the involved extremity straight for 4 to 6 hours.

      Rationale: This is correct. Immediately after the procedure the nurse will ensure that the limb used for cardiac catheterization is kept straight with no movement for 4 to 6 hours. The child should be positioned flat on the back; a sandbag may be used on the extremity. All precautions are to prevent bleeding from the puncture site.

   D. Notify the healthcare provider if green or yellow drainage is noted.

      Rationale: This is incorrect. Immediately after a cardiac catheterization, the nurse will not expect to see yellow or green drainage, which is indicative of an infection. The nurse will include this intervention in parent teaching.

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9. The parents are preparing to take their newborn, who was diagnosed with tetralogy of Fallot with pulmonary atresia, home. The nurse is developing a teaching sheet regarding care of the newborn for the parents. Which information does the nurse need to include in the teaching plan?

   A. There is no need to limit activities.

      Rationale: This is incorrect. The parents will be taught to calm the infant by holding the infant over the caregiver's shoulders with the infant's knees drawn up toward the chest. This will increase the blood flow to the lungs. The parents will limit cardiac stress by keeping the infant calm.

   B. It is important to maintain caloric intake.

      Rationale: This is correct. Due to a clinical finding of failure to gain weight, the parents are instructed on the importance of maintaining caloric intake. Frequent small feedings are necessary to meet this need and not increase cardiac stress.

   C. No secondary complications are expected.

      Rationale: This is incorrect. Parents need to monitor for signs and symptoms of heart failure.

   D. The neonate has natural immunity to infections.

      Rationale: This is incorrect. Educate parents on the increased risk of bacterial endocarditis and the prescribed medication regimen.

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10. A parent brings a 2-year-old child with a fever and a rash to the pediatric clinic. The health-care provider suggests the child may have one of several conditions that present with similar symptoms, but wants to rule out Kawasaki disease. Which tests does the nurse expect to be performed? **Select all that apply.**

    Answers cannot be displayed for this alternate item format.

    Rationale: Feedback1.This is incorrect. A chest x-ray will not reveal Kawasaki's disease, as it is a blood infection.2This is correct. The white blood count (WBC) will reveal lymphocytosis and thrombosis, which are present with Kawasaki's disease.3.This is incorrect. Kawasaki's disease is not an allergy reaction, and allergy testing is inappropriate.4.This is correct. A life-threatening complication of Kawasaki's disease is the development of coronary artery aneurysms. Baseline echocardiogram 6 to 8 weeks after the onset of symptoms is used to rule out this complication.5.This is incorrect. MRI will not reveal Kawasaki's disease.

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11. Complete the diagram by dragging from the choices below to specify what condition the client is most likely experiencing, 2 actions the nurse should take to address that condition, and 2 parameters the nurse should monitor to assess the client's progress.

    Answers cannot be displayed for this alternate item format.

    Rationale: The nurse should assess the apical pulse for 1 full min and assess the rhythm strip for a prolonged P-R interval because the infant is most likely experiencing digoxin toxicity. The manifestations of digoxin toxicity that are seen in infants most commonly include vomiting, poor feeding, and bradycardia. The P-R interval is also prolonged if digoxin toxicity is occurring. It is critical the nurse quickly identifies and reports these symptoms to the provider for treatment of digoxin toxicity. Furosemide is a potassium wasting diuretic and can cause hypokalemia. Hypokalemia increases

the potential for digoxin toxicity. The nurse should continue to monitor the infant's heart rate and withhold digoxin per the provider's prescription. It may be necessary to treat the digoxin toxicity with the antidote digoxin immune fab fragment. It is important to continue to monitor digoxin level as treatment is initiated.

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12. Which of the following assessment findings should the nurse report to the provider?**Select the 4 findings that the nurse should report to the provider.**

    Answers cannot be displayed for this alternate item format.

    Rationale: **Sputum is incorrect.** The child's sputum was thick and yellow with streaks of blood on admission and now has no blood streaks. This is an improvement; therefore, this finding does not need to be reported to the provider. **Respiratory effort is correct.** The child's respiratory rate is above the expected reference range, along with the presence of accessory muscle use. The child also reports worsening of the dyspnea. This finding should be reported to the provider. **Temperature is incorrect.** There has been a decrease in the child's temperature from admission; therefore, this finding does not need to be reported to the provider. **Oral intake is incorrect.** The child's appetite has improved and intake has increased; therefore, this finding does not need to be reported to the provider. **Gastrointestinal status is incorrect.** Large, frothy, foul-smelling stools are consistent with steatorrhea, which is an expected finding for a child who has cystic fibrosis; therefore, this finding does not need to be reported to the provider. **Oxygenation is correct.** The child's oxygen saturation is below the expected reference range. A decrease in oxygen saturation, along with increased shortness of breath, labored respirations, tachycardia, and hypotension, can indicate the occurrence of a pneumothorax. Therefore, this finding should be reported to the provider. **Pain is correct.** New onset of chest pain in a child who has cystic fibrosis and pneumonia can indicate the occurrence of a pneumothorax. Additional indicators of a possible pneumothorax include increased shortness of breath, decreased oxygen saturation, labored respirations, tachycardia, and hypotension. Therefore, this finding should be reported to the provider. **Blood pressure is correct.** The child's blood pressure is below the expected reference range. Hypotension, along with respiratory distress, decreased oxygenation, and chest pain in a child who has pneumonia and cystic fibrosis, is indicative of a possible pneumothorax. Therefore, this finding should be reported to the provider.

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13. A nurse is caring for a 4-month-old child diagnosed with influenza. Which order should the nurse expect to read in the electronic health record?

    A. Limit oral hydration.

    Rationale: This is incorrect. Oral or IV hydration should be given to liquefy secretions and prevent dehydration.

    B. Initiate airborne precautions.

    Rationale: This is incorrect. Influenza is spread through contact or droplet precautions. It is important for the nurse and visitors to wear mask, gown, gloves, and goggles/face shield.

    C. Administer acetaminophen for fever.

    Rationale: This is correct. Antipyretics, such as Tylenol, can be given to infants with fever.

    D. Administer ibuprofen for malaise.

    Rationale:

This is incorrect. Ibuprofen should not be given until after 6 months of age.

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14. The nurse is caring for a child who has been diagnosed with epiglottitis. Which statement by the parents demonstrates effective patient education?

A. “I will stop giving the antibiotics when my daughter feels better.”

Rationale: This is incorrect. The full course of antibiotics should always be taken.

B. “I will look into her mouth and throat to see it is red and swollen.”

Rationale: This is incorrect. Inspection of the oropharynx could stimulate bronchospasm and lead to complete airway occlusion and death. Therefore, this should only be done with emergency personnel and intubation supplies on hand.

C. “I will comfort her as much as possible to prevent her from crying.”

Rationale: This is correct. Parents should comfort the child to help prevent crying. Crying can overstress the already inflamed larynx leading laryngospasms and airway occlusion.

D. “I will expect the doctor to order a polymerase chain reaction (PCR) test to confirm the diagnosis.”

Rationale: This is incorrect. Epiglottitis is diagnosed based on clinical symptoms and x-ray.

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15. The nurse is providing care for an infant with an inner ear infection. The nurse is aware that the condition has occurred multiple times in a 3-month period. Which comment by the parent indicates to the nurse that specific teaching is needed regarding the incidences of infection?

A. “I now put her to bed with a bottle.”

Rationale: This is correct. Eustachian tubes are shorter and more horizontal in children than adults and are more prone for migration of substances in the mouth to the inner ear, causing an inner ear infection. The migration of milk is enhanced by putting an infant to bed with a bottle. The nurse will present teaching on this topic.

B. “I clean her ears with cotton swabs.”

Rationale: This is incorrect. The nurse will reinforce that cotton swabs should not be placed in a child’s ear. However, the practice is less likely to be the cause of an inner infection.

C. “She likes her ears submerged while bathing.”

Rationale: This is incorrect. Some infants do not mind having their ears submerged when in a bath. This practice alone is not likely to be the cause of an inner infection.

D. “Her older brother brings colds home from school.”

Rationale: This is incorrect. An infant may be susceptible to an upper respiratory infection from an older sibling who attends school. However, the scenario does not present other symptoms of a cold, such as a stuffy nose.

16. The nurse in an acute care pediatric facility is preparing to assume care of multiple patients at the change of shift. Which patient will the nurse plan to assess **first**?

A. The toddler who exhibits clubbing of the fingertips

Rationale: This is incorrect. A toddler may exhibit clubbing of the fingertips if diagnosed with chronic hypoxia from a chronic respiratory disorder. The manifestation occurs over a period of time and does not alone indicate a need for being assessed first.

B. The preschooler with pneumonia who has poor skin turgor

Rationale: This is incorrect. The preschooler with pneumonia and poor skin turgor may be dehydrated from mouth breathing, tachypnea, fever, and/or anorexia. Without additional symptoms, this is not the patient the nurse will assess first.

C. The infant who can sleep only with the head of the bed elevated

Rationale: This is incorrect. The infant who can sleep only with the head of the bed elevated is not presently in distress. This patient does not need to be assessed first.

D. The infant who prefers a tripod position instead of lying down

Rationale: This is correct. When an infant prefers to sit in a tripod position, exhibits a jaw thrust, or is insistent on sitting upright, the indications are relevant to air hunger and oxygen deficiency. This is the patient the nurse will assess first.

17. The nurse is providing postoperative teaching to the parents of a preschool child after a tonsillectomy. For which events does the nurse prompt the parents to contact the physician? **Select all that apply.**

Answers cannot be displayed for this alternate item format.

Rationale: Feedback1.This is incorrect. It is not unusual for a child to experience nausea from drainage after a tonsillectomy. There is no need to contact the physician unless the nausea is severe and there is a risk for vomiting.2.This is correct. Frequent swallowing without the presence of food or fluid is an indication of bleeding; the parents are instructed to call the physician if this occurs. 3.This is correct. Bright red blood in the child's nose or mouth is indicative of bleeding, and the physician needs to be called. 4.This is incorrect. The child's willingness to eat ice chips and popsicles will sooth the throat, help to stop bleeding, and promote hydration. 5.This is correct. If the child refuses to take pain medications because it hurts to swallow, the doctor needs to be contacted.

18. The nurse is conducting a class for parents of children with asthma. After covering the topic of asthma triggers, the nurse asks for feedback on the information. Which statements indicate the parents understand actions to reduce asthma triggers? **Select all that apply.**

Answers cannot be displayed for this alternate item format.

Rationale: Feedback1.This is correct. Smoke from any source is a commonly recognized trigger for asthma; understanding the need to stop using the fireplace is indicative of an appropriate action.2.This is correct. Pet dander is a commonly recognized trigger for asthma; voicing the need to reconsider

getting a family pet is indicative of an appropriate action. 3.This is incorrect. Cold air is commonly recognized as a trigger for asthma; however, moving to a warmer climate is not necessary. The patient needs to place a scarf over the mouth and nose before being exposed to cold air. 4.This is incorrect. Viral infections are commonly recognized as a trigger for asthma; however, wearing a mask whenever going outside the home is not a necessary action. Staying away from people who are ill, good hand hygiene, and promoting overall good health is important. Masks may be considered during flu season. 5.This is correct. Stress is a commonly recognized trigger for asthma; reorganizing schedules may be an effective way to reduce stress.

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19. The nurse reassesses the infant at 1630. Which of the following assessment findings should the nurse report to the provider? **Select the 4 findings that the nurse should report to the provider.**

    Answers cannot be displayed for this alternate item format.

    Rationale: Apical pulse is incorrect. The infant's apical pulse is within the expected reference range, even with the infant crying; therefore, this finding does not need to be reported to the provider.Respiratory rate is correct. The infant's respiratory rate is higher than the expected reference range and the infant is displaying retractions, which indicates the infant's respiratory condition is worsening; therefore, the nurse should report this finding to the provider.Oxygen saturation is correct. The infant's oxygen saturation is lower than the expected reference range and indicates the infant's respiratory condition is worsening; therefore, the nurse should report this finding to the provider.Wheezing is correct. The infant is wheezing, which is an indication that the disease has progressed to the lower respiratory tract, causing altered air exchange; therefore, the nurse should report this finding to the provider.Nasal secretions is incorrect. Copious nasal secretions are an expected manifestation of bronchiolitis; therefore, this finding does not need to be reported to the provider.Retractions is correct. The infant is displaying retractions, which indicates the infant is using a strong force to pull air into the respiratory system. This requires immediate assistance; therefore, the nurse should report this finding to the provider.Temperature is incorrect. Fever is an expected manifestation of bronchiolitis; therefore, the nurse does not need to report this finding to the provider.

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20. The nurse is assessing a 10-year-old patient post-appendectomy postsurgery. Which finding does the nurse recognize as a sign of hypovolemic shock?

    A. Heart rate of 60

    Rationale: This is incorrect. Shock is the inability to maintain adequate blood flow and oxygenation to the tissues. Tachycardia, not bradycardia, is indicative of shock.

    B. Temperature of 103°F (39.4°C)

    Rationale: This is incorrect. Fever is not an indication of shock.

    C. Urine output

    Rationale: This is correct. Decreased or no urine output is indicative of shock. This means that blood flow is not going to a major organ in the body—the kidneys.

    D. Increased blood pressure

    Rationale: This is incorrect. Increased blood pressure after surgery might result from pain. It is not an

indicator of shock.