

COMPREHENSIVE MOCK EXAM 6

Supplemental to: Pediatric Hospital Medicine Board Review 2026-2027

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American Board of Pediatrics (ABP) Pediatric Hospital Medicine Certification Exam — 200 questions, single-best-answer, 5 options (A-E), domain-weighted per official ABP blueprint

Board-Review Questions

1. A 2-year-old with a febrile seizure has ongoing rhythmic limb jerking 20 minutes after onset, despite two doses of intranasal midazolam given 10 minutes apart by EMS. Vitals are stable and glucose is normal. What is the most appropriate next step?
- A. Give a third dose of intranasal midazolam and reassess in 5 minutes
 - B. Begin therapeutic hypothermia while preparing for intubation
 - C. Obtain an emergent MRI brain before any further pharmacologic treatment
 - D. Load with intravenous fosphenytoin or levetiracetam as a second-line status epilepticus agent
 - E. Administer a high-dose intravenous dexamethasone bolus
2. A 14-month-old is hospitalized with confirmed pneumococcal meningitis and is 36 hours into appropriate IV ceftriaxone and vancomycin. The bedside nurse reports new right-sided facial droop and decreased alertness. What is the most appropriate next step?
- A. Repeat lumbar puncture immediately to reassess CSF clearance
 - B. Increase the vancomycin dose empirically for presumed undertreatment
 - C. Attribute the findings to a postictal state and continue current management
 - D. Add empiric acyclovir for presumed concurrent herpes encephalitis
 - E. Obtain emergent neuroimaging to evaluate for a complication such as subdural empyema
3. A 4-year-old is admitted with altered mental status, tachycardia, and dry mucous membranes. Glucose is 410 mg/dL and there is a fruity breath odor. Which mechanism best accounts for this presentation?
- A. Primary CNS infection causing cerebral edema and secondary hyperglycemia
 - B. Excess antidiuretic hormone secretion causing dilutional hyperglycemia
 - C. Insulin deficiency leading to unrestrained lipolysis, ketogenesis, and an osmotic diuresis causing dehydration
 - D. Acute adrenal insufficiency causing a hyperglycemic crisis
 - E. Salicylate toxicity producing a mixed acid-base disturbance with hyperglycemia

4. A previously healthy 6-year-old develops progressive ascending bilateral leg weakness over 4 days, absent deep tendon reflexes, and mild facial weakness, 2 weeks after a diarrheal illness. Which finding would most support the leading diagnosis?

- A.** CSF showing elevated protein with a normal white cell count (albuminocytologic dissociation)
- B.** CSF pleocytosis with a markedly elevated neutrophil count
- C.** MRI spine showing a discrete enhancing intramedullary mass
- D.** Serum creatine kinase elevated more than 20-fold above normal
- E.** EMG showing pure primary muscle fiber pathology without nerve involvement

5. An 8-year-old with sinusitis develops fever, headache, and new left-sided weakness over 3 days. MRI shows a ring-enhancing lesion with surrounding edema in the right frontal lobe. What is the most appropriate initial management?

- A.** Start high-dose IV corticosteroids alone and repeat imaging in one week
- B.** Begin oral antibiotics and manage as an outpatient with close follow-up
- C.** Start empiric antibiotics and obtain neurosurgical consultation
- D.** Initiate anticoagulation for presumed venous sinus thrombosis
- E.** Observe without antimicrobial therapy pending stereotactic biopsy results

6. A 5-year-old presents with 3 days of fever, headache, and today, new focal seizures and word-finding difficulty. MRI shows temporal lobe hyperintensity. What is the most appropriate immediate management step?

- A.** Start empiric IV acyclovir immediately while confirmatory HSV PCR testing is pending
- B.** Withhold antiviral therapy until CSF HSV PCR results return
- C.** Start broad-spectrum antibacterial therapy alone without antiviral coverage
- D.** Obtain an EEG first and delay treatment until results are available
- E.** Begin a slow oral acyclovir taper as an outpatient

7. A 10-year-old is hospitalized for a headache that has progressively worsened over 3 weeks, is worse in the morning, and is now associated with vomiting and new-onset unsteady gait. Which feature most strongly indicates the need for urgent neuroimaging?

- A. A family history of migraine in the child's mother
- B. Headache that improves substantially with over-the-counter ibuprofen
- C. A normal neurologic examination on the day of presentation
- D. The combination of worsening pattern, morning predominance, vomiting, and new ataxia
- E. Headache occurring only during periods of school-related stress

8. A previously healthy 7-year-old develops sudden left-sided facial droop, arm weakness, and dysarthria while hospitalized for a sickle cell vaso-occlusive crisis. What is the most likely underlying mechanism?

- A. A simple partial seizure with postictal (Todd) paralysis
- B. Conversion disorder related to the stress of hospitalization
- C. Acute ischemic stroke related to sickle cell cerebral vasculopathy
- D. Hypoglycemia from inadequate oral intake during the admission
- E. Bell palsy from viral reactivation during the hospitalization

9. A 2-year-old presents with 2 days of barking cough and inspiratory stridor at rest, drooling, and a muffled voice, sitting forward in a tripod position with high fever. What is the most likely diagnosis?

- A. Viral croup
- B. Bacterial tracheitis
- C. Foreign body aspiration
- D. Epiglottitis
- E. Retropharyngeal abscess

10. A 3-year-old has fever, neck stiffness, and refusal to extend the neck, with drooling and torticollis. Lateral neck imaging shows widening of the prevertebral soft tissue space. What is the most appropriate next step?

- A.** Begin oral antibiotics and reassess as an outpatient in 48 hours
- B.** Obtain CT of the neck with contrast and involve otolaryngology/surgery for possible drainage
- C.** Perform bedside needle aspiration of the prevertebral space without imaging guidance
- D.** Immobilize the neck and observe without further imaging or antibiotics
- E.** Start antiviral therapy while awaiting spontaneous resolution

11. A 9-year-old has severe unilateral sore throat, trismus, muffled 'hot potato' voice, and uvular deviation away from the affected side. What is the most likely diagnosis?

- A.** Peritonsillar abscess
- B.** Streptococcal pharyngitis without complication
- C.** Infectious mononucleosis with tonsillar hypertrophy
- D.** Ludwig angina
- E.** Acute epiglottitis

12. A 4-year-old with periorbital swelling and erythema after a sinus infection is noted to have pain with extraocular movements, proptosis, and decreased visual acuity. What is the most appropriate next step?

- A.** Treat as preseptal cellulitis with oral antibiotics and outpatient follow-up
- B.** Begin topical ophthalmic antibiotic drops alone
- C.** Discharge home with warm compresses and reassessment in 3 days
- D.** Obtain emergent contrast-enhanced CT of the orbits and sinuses to evaluate for orbital cellulitis
- E.** Start oral antihistamines for a presumed allergic reaction

13. A 2-year-old with a recent history of acute otitis media now has postauricular swelling, erythema, and the pinna is displaced anteriorly and inferiorly. What is the most likely diagnosis?

- A. Acute mastoiditis**
- B. Recurrent otitis media**
- C. Preauricular cellulitis**
- D. Acute parotitis**
- E. Cervical lymphadenitis**

14. A 3-year-old has a tender, enlarging, fluctuant right neck mass with overlying erythema and low-grade fever, 5 days after an upper respiratory infection. What is the most likely underlying process?

- A. Suppurative cervical lymphadenitis**
- B. Thyroglossal duct cyst infection**
- C. Branchial cleft cyst without infection**
- D. Kawasaki disease**
- E. Cat-scratch disease with early granulomatous change**

15. A 6-year-old with acute sinusitis develops fever, severe headache, and eyelid swelling with proptosis, followed by rapid decline in mental status. What complication is most concerning in this evolving presentation?

- A. Simple viral upper respiratory infection with allergic eyelid swelling**
- B. Migraine with associated periorbital edema**
- C. Acute angle-closure glaucoma**
- D. Uncomplicated preseptal cellulitis**
- E. Intracranial extension of sinus infection**

16. A 5-year-old develops bilateral tender swelling anterior to and below the ears, fever, and trismus, with no MMR vaccination history. What is the most likely diagnosis?

- A. Viral parotitis (mumps)**
- B. Bacterial suppurative parotitis**

- C. Sialolithiasis with sialadenitis
- D. Cervical lymphadenitis
- E. Preauricular lymphadenitis

17. A 4-month-old with bronchiolitis has an oxygen saturation of 89% on room air despite nasal suctioning, with moderate subcostal retractions but no apnea. What is the most appropriate next step in respiratory support?

- A. Initiate supplemental oxygen via nasal cannula titrated to target saturations
- B. Administer nebulized albuterol as first-line therapy
- C. Start empiric IV antibiotics for presumed bacterial superinfection
- D. Give a single dose of nebulized racemic epinephrine and discharge if improved
- E. Begin systemic corticosteroids as first-line bronchiolitis therapy

18. A 9-year-old with known asthma is admitted for a severe exacerbation. After three rounds of continuous albuterol/ipratropium and IV corticosteroids, she remains tachypneic with a silent chest and rising CO₂ on venous blood gas. What is the most appropriate next step?

- A. Discontinue bronchodilators to reduce tachycardia and reassess in one hour
- B. Obtain a chest CT before considering any further pharmacologic escalation
- C. Start IV magnesium sulfate and prepare for possible escalation to terbutaline infusion
- D. Switch to oral prednisone in place of IV corticosteroids
- E. Administer a single dose of inhaled antibiotics for presumed bacterial component

19. A previously healthy 3-year-old is hospitalized with community-acquired pneumonia, fully immunized, with lobar consolidation on chest x-ray and no evidence of effusion or sepsis. What is the most appropriate empiric antibiotic choice?

- A. Vancomycin plus a third-generation cephalosporin as first-line therapy
- B. Oral azithromycin monotherapy as first-line therapy
- C. Broad-spectrum carbapenem therapy as first-line empiric coverage

- D.** Ampicillin (or penicillin) as first-line therapy targeting *Streptococcus pneumoniae*
- E.** Clindamycin monotherapy as first-line therapy

20. A 2-year-old with severe pneumonia has increasing work of breathing on high-flow nasal cannula, with rising CO₂ and a declining mental status. What is the most appropriate next step?

- A.** Increase the high-flow nasal cannula flow rate and reassess again in 2 hours
- B.** Switch to a simple face mask at a lower oxygen flow
- C.** Proceed to endotracheal intubation for definitive airway and ventilatory support
- D.** Add nebulized racemic epinephrine to reduce airway edema
- E.** Begin oral antibiotics in place of the current IV regimen

21. A 14-month-old with bronchopulmonary dysplasia on home oxygen is admitted with increased work of breathing and oxygen requirement during a viral illness. Baseline is 0.5 L/min; she now needs 2 L/min to maintain saturations. What is the most appropriate framework for this admission?

- A.** Assume this reflects a new primary cardiac defect and pursue an echocardiogram before any respiratory treatment
- B.** Manage as an acute-on-chronic respiratory exacerbation, supporting oxygenation while treating the precipitating viral illness
- C.** Treat identically to a previously healthy infant's first bronchiolitis episode with no attention to her baseline status
- D.** Wean oxygen support immediately to baseline regardless of current saturations
- E.** Attribute the change entirely to non-adherence with home oxygen therapy without further evaluation

22. A previously healthy 18-month-old has sudden-onset coughing and choking while eating peanuts, followed by unilateral decreased breath sounds and localized wheezing on the right. What is the most appropriate next step?

- A.** Treat empirically with bronchodilators for presumed asthma exacerbation
- B.** Obtain a chest CT with contrast before considering any procedural intervention

- C. Arrange for rigid bronchoscopy for airway foreign body retrieval
- D. Observe for 24 hours to see if symptoms resolve spontaneously
- E. Start empiric antibiotics for presumed pneumonia and reassess in 48 hours

23. A 3-year-old initially diagnosed with croup develops worsening high fever, a toxic appearance, and thick purulent secretions with stridor that does not respond to racemic epinephrine. What is the most likely diagnosis?

- A. Uncomplicated viral croup
- B. Recurrent (spasmodic) croup
- C. Bacterial tracheitis
- D. Foreign body aspiration
- E. Peritonsillar abscess

24. A 5-year-old with pneumonia has persistent fever on day 4 of appropriate antibiotics, with a new pleuritic chest pain and decreased breath sounds at the right base. What is the most appropriate next step?

- A. Switch to a completely different empiric antibiotic class without further imaging
- B. Discharge home with oral antibiotics since day 4 fever is expected
- C. Add antiviral therapy for a presumed viral co-infection
- D. Increase the current antibiotic dose without additional evaluation
- E. Obtain chest imaging (ultrasound or CT) to evaluate for a parapneumonic effusion or empyema

25. An 8-year-old hospitalized for an asthma exacerbation has been on albuterol every 4 hours for 24 hours, is on room air with normal work of breathing, and has a peak flow near personal best. What is the most appropriate next step?

- A. Continue inpatient observation for at least 3 more days regardless of clinical status
- B. Add a second systemic corticosteroid course before considering discharge

- C. Transition to a discharge-appropriate regimen with a controller medication plan and close outpatient follow-up
- D. Escalate to continuous nebulized albuterol despite the improved status
- E. Discharge immediately with no controller therapy or follow-up plan

26. A former 28-week premature infant, now 4 months chronologic age with chronic lung disease, is being evaluated for eligibility for RSV prophylaxis (palivizumab) heading into RSV season. Which factor is most directly relevant to this eligibility decision?

- A. The family's preference for a shorter hospital stay at the time of birth
- B. The infant's blood type and Rh status
- C. Gestational age at birth combined with ongoing chronic lung disease
- D. A history of a single uncomplicated episode of otitis media
- E. The mother's vaccination status during pregnancy

27. A 12-day-old presents in shock with poor perfusion, weak femoral pulses, and a new murmur, several days after a normal newborn discharge. Blood pressure in the legs is markedly lower than in the arms. What is the most likely diagnosis?

- A. Coarctation of the aorta with ductal closure precipitating obstructive shock
- B. Neonatal sepsis with distributive shock
- C. Supraventricular tachycardia causing cardiogenic shock
- D. Congenital adrenal hyperplasia with salt-wasting crisis
- E. Hypertrophic cardiomyopathy presenting acutely

28. A 6-week-old has poor feeding, diaphoresis with feeds, tachypnea, and hepatomegaly, with a gallop rhythm on exam. What is the most likely underlying process?

- A. Congestive heart failure
- B. Gastroesophageal reflux disease alone
- C. Viral bronchiolitis without cardiac involvement

- D. Cow's milk protein intolerance
- E. Simple overfeeding leading to emesis

29. A 3-month-old has a heart rate of 280 bpm, narrow-complex, regular rhythm on monitor, with mild irritability but adequate perfusion and stable blood pressure. What is the most appropriate first step?

- A. Proceed directly to synchronized cardioversion without attempting vagal maneuvers first
- B. Administer IV amiodarone as first-line therapy
- C. Give a fluid bolus alone and reassess in 30 minutes
- D. Start oral beta-blocker therapy and observe without further intervention
- E. Attempt vagal maneuvers (such as an ice pack to the face) before pharmacologic treatment

30. An 8-year-old with a known ventricular septal defect and poor dental hygiene develops fever, new-onset regurgitant murmur, and splinter hemorrhages over 2 weeks. What is the most appropriate next step?

- A. Obtain blood cultures and echocardiography to evaluate for infective endocarditis before starting empiric therapy
- B. Start oral amoxicillin alone for presumed dental abscess without further cardiac workup
- C. Attribute the murmur change to normal VSD progression and observe without additional testing
- D. Begin antifungal therapy empirically without blood cultures
- E. Discharge home with outpatient dental referral only

31. A 15-year-old has a brief loss of consciousness while standing in a hot, crowded room, with preceding lightheadedness, nausea, and tunnel vision, and rapid full recovery. What feature would be most reassuring for a benign (vasovagal) cause rather than a cardiac cause of syncope?

- A. Syncope occurring during vigorous exercise
- B. A family history of sudden unexplained death in a first-degree relative under age 40
- C. A clear situational trigger (prolonged standing, heat)
- D. Syncope preceded by palpitations and chest pain

E. An abnormal baseline ECG with a prolonged QT interval

32. A 10-year-old with chronic kidney disease is admitted with a blood pressure of 180/120 mmHg, severe headache, and blurred vision. What is the most appropriate initial management approach?

- A. Rapidly normalize blood pressure to the 50th percentile within the first hour
- B. Withhold any antihypertensive therapy until outpatient nephrology follow-up
- C. Give a single large oral antihypertensive dose and discharge once he feels better
- D. Begin a controlled, gradual reduction in blood pressure using a titratable IV antihypertensive agent
- E. Treat with IV fluids alone to dilute the elevated pressure

33. A 6-year-old in the hospital becomes unresponsive with no palpable pulse, and the monitor shows a wide-complex, chaotic rhythm. What is the most appropriate immediate action?

- A. Give a synchronized cardioversion shock immediately without compressions
- B. Administer IV adenosine as the first intervention
- C. Perform vagal maneuvers before any other action
- D. Begin high-quality chest compressions and prepare for defibrillation
- E. Obtain a 12-lead ECG before starting any resuscitative measures

34. A 4-year-old with fever and a distended, tender abdomen has cool extremities, a heart rate of 190, and a blood pressure of 70/40 mmHg. Which additional finding would most support septic shock over cardiogenic shock as the primary process?

- A. Jugular venous distension with hepatomegaly and a gallop rhythm
- B. Warm flash phase findings early on
- C. Pulmonary edema on chest x-ray with an enlarged cardiac silhouette
- D. A history of a recent cardiac surgical procedure
- E. Muffled heart sounds with pulsus paradoxus

35. A 9-year-old with 36 hours of periumbilical pain migrating to the right lower quadrant now has diffuse abdominal tenderness, rigidity, and a fever of 39.5 C. What does this evolving picture most likely represent?

- A.** Perforated appendicitis with resulting peritonitis
- B.** Simple early appendicitis without complication
- C.** Mesenteric adenitis alone
- D.** Constipation with fecal impaction
- E.** Primary viral gastroenteritis

36. An 8-month-old has intermittent episodes of drawing up his legs with crying, followed by lethargy between episodes, and a currant-jelly stool. Abdominal ultrasound shows a target sign in the right upper quadrant. What is the most appropriate next step?

- A.** Proceed directly to surgery without attempting enema reduction
- B.** Manage conservatively with bowel rest alone and observe for 24 hours
- C.** Start empiric antibiotics and discharge if pain resolves
- D.** Obtain an upper GI contrast study instead of an enema
- E.** Attempt air or contrast enema reduction under fluoroscopic or ultrasound guidance

37. A 4-week-old has projectile, non-bilious vomiting after most feeds, with a palpable olive-shaped mass in the right upper quadrant. A basic metabolic panel shows a low chloride, low potassium, and elevated bicarbonate. What is the most appropriate first step in management?

- A.** Proceed immediately to pyloromyotomy before any fluid or electrolyte correction
- B.** Start acid-suppressing medication as definitive therapy
- C.** Correct the fluid and electrolyte abnormalities (hypochloremic
- D.** Begin thickened feeds and observe without further intervention
- E.** Obtain an upper GI series before addressing the electrolyte abnormalities

38. A 3-week-old previously well infant develops sudden bilious vomiting and abdominal distension, with an increasingly ill appearance. What is the most appropriate next step?

- A.** Reassure the family that bilious vomiting in a neonate is usually benign reflux
- B.** Start oral rehydration and observe for 24 hours before further workup
- C.** Begin empiric antibiotics alone without surgical consultation
- D.** Delay evaluation until after a trial of formula change for presumed intolerance
- E.** Obtain emergent surgical evaluation and imaging to evaluate for malrotation with volvulus

39. A 6-year-old has several episodes of bright red blood per rectum with normal vital signs and no abdominal pain, but a visible external skin tag near a small anal fissure. What is the most likely cause of the bleeding?

- A.** Upper gastrointestinal bleeding from a bleeding peptic ulcer
- B.** Anal fissure causing minor bright red rectal bleeding
- C.** Meckel diverticulum with painless bleeding
- D.** Inflammatory bowel disease with active colitis
- E.** Intussusception causing currant-jelly stool

40. A 2-year-old with acute gastroenteritis has mild dehydration, is alert, and is tolerating small sips of fluid without vomiting. What is the most appropriate initial rehydration approach?

- A.** Oral rehydration solution given in small, frequent amounts
- B.** Immediate IV fluid bolus regardless of oral tolerance
- C.** Strict bowel rest with no oral intake for 24 hours
- D.** Full-strength juice ad lib to encourage oral intake
- E.** Placement of a nasogastric tube for rehydration before attempting oral fluids

41. A 12-year-old girl has 3 weeks of fatigue, jaundice, and elevated transaminases, along with a positive antinuclear antibody and anti-smooth muscle antibody, with negative viral hepatitis serologies. What is the most likely diagnosis?

- A.** Acute hepatitis A infection
- B.** Autoimmune hepatitis
- C.** Wilson disease presenting acutely
- D.** Alpha-1 antitrypsin deficiency
- E.** Non-alcoholic fatty liver disease

42. A 10-year-old has acute-onset severe epigastric pain radiating to the back, with vomiting and a lipase level 5 times the upper limit of normal. What is the most appropriate initial management approach?

- A.** IV fluid resuscitation and supportive care with early enteral feeding as tolerated
- B.** Immediate surgical pancreatic resection
- C.** Complete bowel rest with total parenteral nutrition as the default first step for all cases
- D.** High-dose systemic corticosteroids as first-line therapy
- E.** Empiric broad-spectrum antifungal therapy

43. A 14-year-old has chronic bloody diarrhea, weight loss, and colonoscopy showing continuous mucosal inflammation limited to the colon, sparing the terminal ileum. Which diagnosis is most consistent with this pattern?

- A.** Crohn disease with ileal involvement
- B.** Irritable bowel syndrome
- C.** Ulcerative colitis (UC)
- D.** Infectious colitis from a self-limited bacterial pathogen
- E.** Celiac disease

44. A 13-year-old with sickle cell disease has right upper quadrant pain, jaundice, and ultrasound showing gallstones with a dilated common bile duct. What is the most likely explanation for these findings?

- A.** Acute viral hepatitis causing the biliary dilation

- B.** Primary sclerosing cholangitis unrelated to hemolysis
- C.** Chronic hemolysis leading to pigment gallstones
- D.** Wilson disease causing hepatobiliary injury
- E.** A simple functional gallbladder disorder without stones

45. A 4-year-old develops bloody diarrhea after eating undercooked ground beef, followed 5 days later by pallor, decreased urine output, and petechiae. Labs show anemia, thrombocytopenia, and an elevated creatinine. What is the most likely diagnosis?

- A.** Immune thrombocytopenic purpura alone
- B.** Henoch-Schonlein purpura nephritis
- C.** Disseminated intravascular coagulation from sepsis
- D.** Acute post-streptococcal glomerulonephritis
- E.** Hemolytic uremic syndrome (Shiga toxin-associated)

46. A 6-year-old with severe gastroenteritis and poor oral intake has a rising creatinine, a BUN:creatinine ratio greater than 20:1, and a fractional excretion of sodium less than 1%. What does this pattern most likely represent?

- A.** Intrinsic acute tubular necrosis
- B.** Postrenal obstruction from a ureteral stone
- C.** Chronic kidney disease with new superimposed illness
- D.** Acute glomerulonephritis from an immune-mediated process
- E.** Prerenal acute kidney injury from volume depletion

47. A 7-year-old develops tea-colored urine, periorbital edema, and hypertension 10 days after a documented streptococcal throat infection. What is the most likely diagnosis?

- A.** IgA nephropathy presenting for the first time
- B.** Minimal change nephrotic syndrome

- C. Acute post-streptococcal glomerulonephritis
- D. Acute interstitial nephritis from a recent medication
- E. Hemolytic uremic syndrome

48. A 14-year-old has acute, severe, colicky flank pain radiating to the groin, with microscopic hematuria on urinalysis. A CT shows a 4mm stone in the distal ureter without hydronephrosis. What is the most appropriate initial management?

- A. Immediate surgical stone extraction regardless of size or location
- B. Pain control, hydration, and observation for spontaneous stone passage given the small stone size
- C. Emergent dialysis for presumed obstructive kidney failure
- D. High-dose systemic corticosteroids to reduce ureteral inflammation
- E. Strict fluid restriction to reduce urine output and pain

49. A 4-year-old develops periorbital and lower extremity edema over several days, with a urinalysis showing 4+ protein and no significant hematuria. Serum albumin is low and cholesterol is elevated. What is the most likely diagnosis?

- A. Acute post-streptococcal glomerulonephritis
- B. IgA vasculitis (Henoch-Schonlein purpura) nephritis
- C. Minimal change disease (nephrotic syndrome)
- D. Protein-losing enteropathy from celiac disease
- E. Acute interstitial nephritis

50. A sexually active 16-year-old has lower abdominal pain, cervical motion tenderness, and fever. What is the most appropriate management approach?

- A. Withhold antibiotics until definitive culture results return in several days
- B. Begin empiric antibiotic therapy covering gonorrhea, chlamydia
- C. Treat only for a urinary tract infection without addressing possible PID

- D. Manage with analgesics alone and outpatient follow-up in one week**
- E. Start antiviral therapy alone for presumed viral etiology**

51. A 13-year-old girl has sudden-onset severe unilateral lower abdominal pain, nausea, and vomiting, with a tender adnexal mass on exam. What is the most appropriate next step?

- A. Manage conservatively with analgesics and reassess in 48 hours**
- B. Start empiric antibiotics alone for presumed pelvic inflammatory disease without imaging**
- C. Obtain emergent pelvic ultrasound with Doppler flow to evaluate for ovarian torsion**
- D. Obtain a plain abdominal x-ray as the primary diagnostic test**
- E. Discharge home with a presumptive diagnosis of a simple ruptured ovarian cyst without further evaluation**

52. A 3-year-old girl has fever, vomiting, and a positive urinalysis for a UTI, and this is her second febrile UTI in 6 months. What is the most appropriate next step regarding imaging?

- A. No imaging is indicated regardless of recurrence after a first febrile UTI**
- B. Obtain an MRI of the brain to evaluate for a central cause of recurrent infection**
- C. Obtain a renal and bladder ultrasound to evaluate for anatomic abnormalities**
- D. Proceed directly to renal biopsy without imaging**
- E. Obtain a chest x-ray to evaluate for infectious source**

53. A 4-year-old refuses to bear weight on the right leg, with fever of 39.2 C, an ESR of 55, CRP of 60, and WBC of 14,000. The hip is held flexed and externally rotated with severe pain on any movement. What is the most likely diagnosis?

- A. Transient synovitis**
- B. Septic arthritis of the hip**
- C. Legg-Calve-Perthes disease**
- D. Slipped capital femoral epiphysis**

E. Juvenile idiopathic arthritis flare

54. A 6-year-old with a supracondylar humerus fracture after a fall has an absent radial pulse, cool fingers, and no active finger movement on the affected side. What is the most appropriate next step?

- A. Apply a splint and reassess pulses in 24 hours before further action
- B. Emergent orthopedic surgical evaluation for urgent reduction and possible vascular exploration
- C. Discharge home with elevation and ice, with outpatient follow-up in 1 week
- D. Begin therapeutic anticoagulation before any orthopedic intervention
- E. Observe in the emergency department with serial exams over the next 12 hours before involving orthopedics

55. A 3-year-old has had fever for 6 days, along with bilateral non-exudative conjunctival injection, a strawberry tongue, a diffuse polymorphous rash, and swollen, erythematous hands. What is the most appropriate next step?

- A. Begin treatment with IVIG and high-dose aspirin, and obtain a baseline echocardiogram
- B. Treat with a single course of oral antibiotics for presumed scarlet fever without further workup
- C. Reassure the family this is a self-limited viral exanthem requiring no treatment
- D. Start systemic corticosteroids alone as first-line therapy without IVIG
- E. Observe without treatment until fever resolves spontaneously

56. A child treated for Kawasaki disease with IVIG and aspirin continues to have fever 48 hours after completing the infusion, with persistent conjunctival injection and rash. What is the most appropriate next step?

- A. Repeat the same aspirin dose alone and wait an additional week
- B. Switch immediately to long-term low-dose aspirin without further anti-inflammatory treatment
- C. Assume treatment failure means the diagnosis was incorrect and stop all therapy
- D. Begin broad-spectrum antibiotics for presumed bacterial superinfection
- E. Administer a second dose of IVIG for IVIG-resistant Kawasaki disease

57. A 6-year-old has palpable purpura on the buttocks and lower extremities, along with abdominal pain and swollen, tender ankles, following a recent upper respiratory infection. Urinalysis shows microscopic hematuria. What is the most likely diagnosis?

- A.** Idiopathic thrombocytopenic purpura
- B.** Meningococemia
- C.** Child abuse-related bruising
- D.** IgA vasculitis (HSP)
- E.** Acute rheumatic fever

58. An 8-year-old has had daily high spiking fevers for 3 weeks, an evanescent salmon-colored rash that appears with fever spikes, and polyarthritits, with negative blood and joint cultures. What is the most likely diagnosis?

- A.** Occult bacteremia with an unidentified organism
- B.** Acute leukemia presenting with fever and joint pain
- C.** Kawasaki disease
- D.** Viral polyarthritits from parvovirus B19
- E.** Systemic-onset juvenile idiopathic arthritis (Still disease)

59. A 15-year-old girl has a malar rash, oral ulcers, joint pain, and proteinuria, with positive ANA and anti-dsDNA antibodies. What is the most likely diagnosis?

- A.** Juvenile dermatomyositis
- B.** Drug-induced lupus from a recent antibiotic course
- C.** Systemic lupus erythematosus
- D.** Mixed connective tissue disease
- E.** Fibromyalgia with an incidental positive ANA

60. A 7-year-old with IgA vasculitis (HSP) diagnosed 2 weeks ago now has new hypertension and increasing proteinuria on follow-up urinalysis. What is the most appropriate next step?

- A.** Reassure the family that renal involvement in HSP never requires further evaluation
- B.** Discontinue all follow-up since the purpuric rash has already resolved
- C.** Start empiric antibiotics for presumed urinary tract infection without further renal workup
- D.** Begin chronic dialysis immediately without further nephrology evaluation
- E.** Refer to nephrology for close monitoring and consideration of renal biopsy given evidence of significant renal involvement

61. A 6-year-old has had 3 weeks of excessive thirst and urination, with dilute urine (low urine osmolality) despite a high serum osmolality, and no glucosuria. What is the most likely diagnosis?

- A.** Diabetes insipidus (central or nephrogenic)
- B.** Type 1 diabetes mellitus
- C.** Primary polydipsia (psychogenic water drinking)
- D.** Syndrome of inappropriate antidiuretic hormone secretion
- E.** Chronic kidney disease with impaired concentrating ability

62. A child hospitalized with bacterial meningitis develops a serum sodium of 122 mEq/L, low serum osmolality, and inappropriately concentrated urine, without signs of volume depletion. What is the most likely mechanism?

- A.** Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
- B.** Diabetes insipidus causing hypernatremic dehydration
- C.** Simple dehydration from poor oral intake alone
- D.** Adrenal insufficiency causing salt-wasting
- E.** Excess free water loss from osmotic diuresis

63. A 15-year-old with known Graves disease is admitted with fever, tachycardia to 160, agitation, and vomiting after stopping her antithyroid medication for 2 weeks. What is the most appropriate immediate management?

- A.** Restart low-dose antithyroid medication alone and reassess in 1 week as an outpatient

- B.** Administer radioactive iodine therapy immediately as the first intervention
- C.** Treat as thyroid storm with beta-blockade, antithyroid medication, iodine solution, and supportive care
- D.** Treat with IV fluids alone and observe without any thyroid-directed therapy
- E.** Begin empiric antibiotics alone assuming a primary infectious cause

64. A newborn with congenital heart disease and characteristic facial features develops jitteriness and a seizure on day 2 of life. Labs show a low ionized calcium. What underlying diagnosis should be most strongly considered?

- A.** Simple transient neonatal hypoglycemia unrelated to calcium
- B.** Congenital hypothyroidism
- C.** Vitamin D toxicity
- D.** Maternal hyperparathyroidism causing neonatal hypercalcemia
- E.** 22q11.2 deletion syndrome (DiGeorge) with hypoparathyroidism

65. A 5-year-old with known congenital adrenal hyperplasia misses several days of her home hydrocortisone during an intercurrent illness and presents with vomiting, lethargy, hypotension, hyponatremia, and hyperkalemia. What is the most appropriate immediate management?

- A.** Give oral hydrocortisone at the usual home maintenance dose only
- B.** Withhold steroids until confirmatory cortisol levels return
- C.** Treat only the hyperkalemia with a potassium binder and observe without steroid administration
- D.** Administer mineralocorticoid replacement alone without glucocorticoid
- E.** Administer IV stress-dose hydrocortisone along with isotonic fluid resuscitation and dextrose as needed

66. A 9-year-old with new diabetic ketoacidosis is receiving IV fluids and an insulin infusion. Two hours into treatment, he develops a sudden severe headache, decreased heart rate, and rising blood pressure. What is the most appropriate immediate action?

- A.** Treat empirically for cerebral edema with hypertonic saline or mannitol and reduce IV fluid rate

- B.** Increase the IV fluid rate to improve perfusion
- C.** Increase the insulin infusion rate to correct the underlying hyperglycemia faster
- D.** Obtain a head CT before starting any treatment for the new symptoms
- E.** Attribute the symptoms to typical DKA-related fatigue and continue the current regimen unchanged

67. A 3-year-old is brought in after a witnessed seizure during a prolonged illness with poor oral intake. Point-of-care glucose is 38 mg/dL. After treatment for hypoglycemia, which additional test obtained during the hypoglycemic episode would be most useful for determining the underlying cause?

- A.** A random glucose level drawn the following day after treatment
- B.** A critical sample drawn at the time of hypoglycemia
- C.** A complete blood count drawn after glucose correction
- D.** A urine culture obtained after the episode has resolved
- E.** A chest x-ray obtained after glucose normalization

68. A 3-day-old term newborn who was feeding well develops poor feeding, lethargy, vomiting, and rapid breathing, with an ammonia level markedly elevated and a normal glucose. What is the most likely category of underlying disorder?

- A.** Neonatal sepsis with typical bacterial meningitis
- B.** A urea cycle defect causing hyperammonemia
- C.** Simple feeding intolerance from formula overfeeding
- D.** Congenital hypothyroidism
- E.** Neonatal opioid withdrawal (neonatal abstinence syndrome)

69. A 4-month-old non-ambulatory infant has a skeletal survey showing a classic metaphyseal corner fracture of the distal femur, with no history of trauma provided by caregivers. What does this finding most strongly suggest?

- A.** Non-accidental trauma, given the fracture pattern in a non-mobile infant

- B.** A normal variant of bone development requiring no further workup
- C.** Osteogenesis imperfecta as the sole explanation without further evaluation
- D.** A birth-related fracture that is expected to still be visible at this age
- E.** Rickets from vitamin D deficiency as the most likely explanation

70. A 6-year-old discloses that a family member touched her inappropriately. She has no acute injuries and the disclosure occurred 2 weeks ago. What is the most appropriate next step?

- A.** Perform a detailed genital exam immediately in the emergency department using standard non-specialized equipment
- B.** Repeatedly and directly question the child for more details before any referral
- C.** Report to child protective services and arrange a specialized forensic medical evaluation
- D.** Delay any reporting until the family confirms the allegation independently
- E.** Discharge with no further action since there are no acute injuries

71. A mother repeatedly reports symptoms in her toddler (vomiting, seizures) that are never witnessed by staff, and the child's symptoms consistently resolve when the mother is not present. Multiple extensive workups have been unrevealing. What should be most strongly considered?

- A.** A rare undiagnosed genetic syndrome requiring more advanced genetic testing before any other action
- B.** Medical child abuse (previously termed Munchausen syndrome by proxy)
- C.** Simple parental anxiety requiring reassurance alone
- D.** Munchausen syndrome affecting the mother herself, requiring only her own psychiatric referral with no action regarding the child
- E.** A conversion disorder in the child requiring psychiatric referral alone

72. A 3-month-old, too young to independently roll or crawl, is brought in with bruising on the torso, ears, and neck. Using recognized bruising screening criteria for young infants, how should these findings be interpreted?

- A.** Bruising anywhere on a young infant is expected and requires no further workup

- B.** Only bruising on the shins and knees would ever be concerning at this age
- C.** These bruise locations in a pre-mobile infant (torso, ears
- D.** These bruises should be attributed to normal handling during diapering without further evaluation
- E.** A single bruise anywhere on the body, regardless of location or age, is never concerning

73. A 7-year-old has a warm, tender, erythematous area on the leg with a fluctuant, pointing center and no surrounding lymphangitic streaking. What is the most appropriate management approach?

- A.** Oral antibiotics alone without any drainage procedure
- B.** Warm compresses alone with no antibiotics or drainage
- C.** IV antibiotics alone without addressing the fluctuant collection
- D.** Incision and drainage of the fluctuant collection
- E.** Observation only with reassessment in one week

74. A 10-year-old started on a new anticonvulsant 2 weeks ago now has fever, targetoid skin lesions, and painful mucosal erosions of the mouth and eyes, with skin sloughing on less than 5% of body surface area. What is the most appropriate next step?

- A.** Continue the anticonvulsant at a reduced dose while monitoring symptoms
- B.** Treat only with oral antihistamines and discharge home
- C.** Add a second anticonvulsant to control presumed breakthrough seizures causing the rash
- D.** Apply topical corticosteroids alone and observe as an outpatient
- E.** Immediately discontinue the offending medication and provide supportive burn-unit-level wound and mucosal care

75. A 4-year-old with a history of atopic dermatitis develops widespread, painful, punched-out vesicular lesions with fever, worsening rapidly over 2 days on top of his usual eczema. What is the most appropriate management?

- A.** Start systemic antiviral therapy for eczema herpeticum and evaluate for possible hospitalization

- B.** Increase topical corticosteroid potency alone as first-line treatment
- C.** Treat with oral antibiotics alone for presumed bacterial superinfection
- D.** Manage with emollients alone and observe for spontaneous resolution
- E.** Start an antifungal cream for presumed tinea superinfection

76. A 9-year-old develops target-shaped skin lesions with a dusky center, days after a documented *Mycoplasma pneumoniae* infection, with mild oral mucosal involvement but no significant skin sloughing or systemic toxicity. What is the most likely diagnosis?

- A.** Erythema multiforme (Mycoplasma-triggered)
- B.** Stevens-Johnson syndrome with extensive epidermal detachment
- C.** Toxic epidermal necrolysis
- D.** Urticarial drug reaction
- E.** Meningococemia

77. A 7-year-old with a minor scrape on the leg develops rapidly spreading erythema, severe pain out of proportion to exam findings, and skin that becomes dusky with bullae over several hours, along with high fever and hypotension. What is the most likely diagnosis?

- A.** Simple cellulitis without deeper involvement
- B.** Necrotizing fasciitis (surgical emergency)
- C.** Contact dermatitis from a topical irritant
- D.** Erysipelas without deep tissue involvement
- E.** Insect bite reaction with local inflammation

78. A previously healthy 5-year-old develops rapidly spreading purpuric, non-blanching skin lesions with a toxic appearance, fever, and hypotension over a few hours. What is the most appropriate immediate management priority?

- A.** Obtain outpatient dermatology referral for further evaluation over the next several days
- B.** Apply topical corticosteroid cream to the purpuric lesions

- C. Immediate empiric broad-spectrum antibiotics and aggressive hemodynamic resuscitation
- D. Wait for blood culture results before starting any antibiotics
- E. Treat as a simple allergic reaction with antihistamines alone

79. An 18-month-old on an exclusively cow's milk-heavy diet (over 32 oz/day) with minimal solid food intake has pallor and fatigue. Labs show microcytic anemia with a low ferritin. What is the most likely diagnosis?

- A. Iron deficiency anemia
- B. Beta-thalassemia trait
- C. Anemia of chronic inflammation
- D. Vitamin B12 deficiency anemia
- E. Hereditary spherocytosis

80. A 9-year-old with sickle cell disease, admitted for a vaso-occlusive pain crisis, develops new chest pain, fever, and a new infiltrate on chest x-ray with hypoxia. What is the most appropriate diagnosis and priority action?

- A. Simple community-acquired pneumonia managed identically to a child without sickle cell disease
- B. Pulmonary embolism requiring only anticoagulation without any transfusion consideration
- C. Acute chest syndrome, requiring incentive spirometry, oxygen support, antibiotics, and consideration of transfusion
- D. Costochondritis requiring only oral analgesics
- E. Asthma exacerbation unrelated to the underlying sickle cell disease

81. A previously healthy 3-year-old develops sudden-onset petechiae and bruising 2 weeks after a viral illness, with an isolated platelet count of 8,000 and an otherwise normal CBC and peripheral smear. What is the most likely diagnosis?

- A. Acute lymphoblastic leukemia
- B. Immune thrombocytopenic purpura (ITP)

- C. Disseminated intravascular coagulation
- D. Hemolytic uremic syndrome
- E. Aplastic anemia

82. A 2-year-old boy has recurrent large joint swelling after minor falls and prolonged bleeding after a minor procedure, with a normal platelet count but a prolonged activated partial thromboplastin time (aPTT) and normal PT. What is the most likely diagnosis?

- A. Von Willebrand disease as the most likely single explanation
- B. Vitamin K deficiency
- C. Immune thrombocytopenic purpura
- D. Hemophilia (Factor VIII or IX deficiency)
- E. Disseminated intravascular coagulation

83. A 6-year-old with acute lymphoblastic leukemia on chemotherapy presents with fever to 38.5 C and an absolute neutrophil count of 300. What is the most appropriate immediate management?

- A. Wait for culture results before starting any antibiotic therapy
- B. Treat with oral antibiotics alone as an outpatient
- C. Obtain blood cultures and begin empiric broad-spectrum IV antibiotics without delay
- D. Administer antipyretics alone and observe without antibiotics
- E. Delay treatment until the neutrophil count recovers above 500

84. A 15-year-old on oral contraceptives, immobilized after a lower leg fracture, develops unilateral calf swelling, warmth, and pain, followed by sudden pleuritic chest pain and shortness of breath. What is the most appropriate next step?

- A. Reassure the patient that leg swelling after a fracture is always expected and requires no further workup
- B. Urgent imaging (such as CT pulmonary angiography) to evaluate for pulmonary embolism, given the described risk factors and symptoms

- C. Treat only for a musculoskeletal chest wall strain without further imaging
- D. Begin oral antibiotics for presumed cellulitis of the leg without addressing the chest symptoms
- E. Discharge home with instructions to follow up only if symptoms worsen over the next week

85. A 6-year-old develops hives, facial swelling, and audible wheezing with difficulty breathing minutes after eating peanuts. What is the most appropriate immediate treatment?

- A. Oral antihistamines alone as the first-line treatment
- B. Inhaled bronchodilator alone without epinephrine
- C. IV corticosteroids alone as the first-line treatment
- D. Intramuscular epinephrine, given first and without delay
- E. Observation alone since symptoms may resolve spontaneously

86. A 5-month-old has had recurrent severe infections since 2 months of age (pneumonia, thrush, chronic diarrhea) and failure to thrive, with an absent thymic shadow on chest x-ray and very low lymphocyte counts. What is the most likely diagnosis?

- A. Severe combined immunodeficiency (SCID)
- B. Transient hypogammaglobulinemia of infancy
- C. Selective IgA deficiency
- D. Simple recurrent viral infections of normal childhood
- E. Chronic granulomatous disease

87. A 7-year-old develops fever, urticarial rash, joint pain, and lymphadenopathy about 10 days after starting a new antibiotic for a prior infection. What is the most likely diagnosis?

- A. IgE-mediated anaphylaxis to the antibiotic
- B. Serum sickness-like reaction to the antibiotic
- C. Kawasaki disease
- D. Simple viral exanthem unrelated to the medication

E. Henoch-Schonlein purpura

88. A 10-year-old is treated in the emergency department for anaphylaxis after a bee sting, with resolution of symptoms after epinephrine and antihistamines. What is the most appropriate next step regarding observation before discharge?

- A. Discharge immediately once initial symptoms resolve, with no observation period needed
- B. Admit to the intensive care unit for at least one week regardless of clinical stability
- C. Observe for an appropriate period after symptom resolution given the risk of a biphasic anaphylactic reaction
- D. Discharge without prescribing any take-home epinephrine auto-injector or after-care plan
- E. Observe for only 5 minutes after symptom resolution before discharge

89. A 3-year-old ingested an unknown quantity of acetaminophen 6 hours ago. A serum acetaminophen level is elevated and plots above the treatment line on the Rumack-Matthew nomogram. What is the most appropriate management?

- A. Observe without treatment since the child currently has no symptoms
- B. Begin N-acetylcysteine therapy promptly based on the nomogram result
- C. Give activated charcoal alone as definitive treatment at this time point
- D. Wait for liver function tests to become abnormal before starting any treatment
- E. Perform hemodialysis as the first-line treatment

90. A 2-year-old ingested an unknown number of iron-containing prenatal vitamins 90 minutes ago and now has vomiting and abdominal pain. What is the most appropriate next step?

- A. Administer activated charcoal as the primary decontamination method
- B. Reassure the family that vomiting means the ingestion was cleared and no further workup is needed
- C. Obtain an abdominal x-ray to assess pill burden and check a serum iron level
- D. Give oral antacids as definitive treatment for the ingestion

E. Wait 24 hours before any laboratory or imaging evaluation

91. A 14-month-old is brought in after witnessed ingestion of a button battery 1 hour ago, currently asymptomatic. What is the most appropriate next step?

- A. Observe at home and only return if symptoms develop over the next several days
- B. Obtain an urgent x-ray to localize the battery and arrange emergent endoscopic removal
- C. Give activated charcoal and discharge if the child remains asymptomatic
- D. Induce vomiting at home to try to expel the battery
- E. Wait 24 hours for spontaneous passage before any imaging is obtained

92. A 6-year-old is bitten by a stray dog with unknown vaccination status that could not be captured for observation, sustaining a scalp laceration. What is the most appropriate management regarding rabies risk?

- A. Withhold rabies prophylaxis since dog bites are rarely associated with rabies transmission in any circumstance
- B. Wait for the child to develop neurologic symptoms before starting any rabies treatment
- C. Begin rabies post-exposure prophylaxis (immune globulin plus vaccine series)
- D. Administer only wound cleaning with no consideration of rabies prophylaxis
- E. Give rabies vaccine alone without rabies immune globulin regardless of exposure risk

93. A 4-year-old is pulled from a pool after an estimated 3-minute submersion, is now breathing spontaneously but coughing, with clear lungs on exam and normal oxygen saturation. What is the most appropriate management approach?

- A. Admit for a period of observation given the risk of delayed pulmonary symptoms after submersion
- B. Discharge immediately from the emergency department with no observation period since the exam is currently normal
- C. Intubate immediately regardless of current respiratory status
- D. Begin therapeutic hypothermia protocol despite the child being alert and breathing well

E. Withhold any monitoring since the submersion time was brief

94. A 7-year-old found outdoors in cold weather has a core temperature of 28 C, is unresponsive, and has a very slow, weak pulse. What is the most appropriate approach to rewarming?

- A. Rapid immersion in very hot water for fastest possible rewarming
- B. Vigorous rubbing and massaging of the extremities to speed rewarming
- C. Simple passive rewarming with blankets alone, given the severity described
- D. Active internal (core) rewarming methods in a monitored setting
- E. Administer a rapid IV potassium bolus before any rewarming measures

95. A 15-year-old football player collapses during practice on a hot, humid day, with a core temperature of 41 C, confusion, and hot, flushed skin. What is the most appropriate immediate management priority?

- A. Rapid cooling (such as cold water immersion) as the immediate priority, alongside supportive care
- B. Give oral fluids alone and allow rest in a shaded area without active cooling
- C. Administer antipyretic medication as the primary treatment
- D. Wait for laboratory results before beginning any cooling measures
- E. Transport to the hospital first and begin cooling only after arrival

96. A 6-year-old falls off a bicycle without a helmet, briefly loses consciousness, then is alert but has a severe headache and one episode of vomiting. A head CT shows a small epidural hematoma without significant midline shift. What is the most appropriate management approach?

- A. Discharge home immediately since the child is currently alert
- B. Admit for close neurologic monitoring with neurosurgical consultation, given the finding, even though there is no midline shift currently
- C. Manage entirely as an outpatient with instructions to return only if the child becomes unresponsive
- D. Treat with oral analgesics alone and repeat imaging only if symptoms have not improved after 2 weeks

E. Assume this represents non-accidental trauma without considering the accidental mechanism described

97. A 6-year-old (20 kg) sustains 25% total body surface area partial-thickness burns. Using a standard pediatric burn fluid resuscitation approach, what is the most appropriate initial management priority?

- A. Begin calculated IV fluid resuscitation based on body weight and burn surface area, titrated to urine output
- B. Restrict all IV fluids to avoid fluid overload regardless of burn size
- C. Apply only topical burn cream with no systemic fluid management
- D. Give a single fixed fluid bolus regardless of burn size or weight, with no further titration
- E. Administer oral fluids only, avoiding any IV access

98. A 3-year-old ingested an unknown number of a family member's tricyclic antidepressant tablets. She now has a widened QRS complex on ECG and is becoming lethargic. What is the most appropriate treatment?

- A. Give activated charcoal alone as the definitive treatment for the cardiac findings
- B. Administer a calcium channel blocker to control the widened QRS
- C. Give IV potassium chloride to correct a presumed electrolyte cause of the QRS widening
- D. Administer IV sodium bicarbonate to narrow the QRS and reduce cardiotoxicity
- E. Perform hemodialysis as the first-line treatment for this ingestion

99. A 2-month-old had a brief episode of color change and apparent apnea lasting 20 seconds, which resolved spontaneously, with the infant now appearing entirely well on exam and no concerning history. Using standard risk stratification, how should this event be categorized and managed?

- A. A higher-risk BRUE automatically requiring intensive care unit admission for all such infants regardless of features
- B. A lower-risk Brief Resolved Unexplained Event (BRUE), which can generally be managed with a period of observation and shared decision-making
- C. A confirmed diagnosis of sudden infant death syndrome

- D.** A normal newborn reflex requiring absolutely no further evaluation or discussion with the family
- E.** An automatic indication for empiric antiepileptic medication regardless of further workup

100. An 8-month-old has crossed two major growth curve percentiles downward over several months. Exam reveals a heart murmur, poor weight gain despite an adequate reported caloric intake, and mild tachypnea with feeds. What category of failure to thrive is most likely, and what should guide the next step?

- A.** Purely non-organic failure to thrive from inadequate caloric intake alone, requiring only a feeding plan
- B.** Normal growth variation requiring no further workup given the reported adequate intake
- C.** Organic failure to thrive, likely related to underlying congenital heart disease, warranting cardiac evaluation
- D.** Failure to thrive from psychosocial neglect alone, requiring only a social work referral
- E.** A simple viral illness explaining the recent weight change, requiring no further evaluation

101. A well-appearing 5-month-old with a fever of 39.0 C and no identifiable source has a blood culture obtained and sent home on close outpatient follow-up. The culture returns positive for a gram-positive organism at 24 hours, and the family reports the child is now afebrile and well. What is the most appropriate next step?

- A.** No further action is needed since the child is currently afebrile and well-appearing
- B.** Assume this is definitely a contaminant with no follow-up needed regardless of clinical context
- C.** Have the family return for reassessment and further evaluation (repeat exam, consideration of repeat cultures) given the positive blood culture
- D.** Start the child on a long-term oral antibiotic course without any further in-person evaluation
- E.** Advise the family to go directly to a pharmacy for antibiotics without any medical reassessment

102. A 25-day-old infant has a rectal temperature of 38.2 C at home, is feeding well, and appears well on exam in the emergency department. What is the most appropriate management approach for this age group?

- A.** Discharge home with reassurance and no testing, given the reassuring exam alone

- B.** Perform a full evaluation for serious bacterial infection (blood, urine)
- C.** Treat only with oral antibiotics as an outpatient without any diagnostic testing
- D.** Obtain only a urine study and discharge if that single result is normal
- E.** Manage identically to a well-appearing 4-year-old with fever, using clinical appearance alone to guide the decision

103. A 6-year-old has had daily fevers for over 3 weeks, with an extensive initial workup (CBC, blood cultures, urinalysis, chest x-ray) unremarkable. What is the most appropriate next step in a fever of unknown origin evaluation?

- A.** Order every possible test simultaneously without any regard for clinical likelihood or history
- B.** Assume the fever is factitious without further evaluation
- C.** Start empiric broad-spectrum antibiotics without further diagnostic workup
- D.** Discharge with reassurance that prolonged fever in children is never significant
- E.** Pursue a systematic, staged further workup guided by any additional history or exam findings (such as travel, exposures)

104. A 10-year-old with acute kidney injury has a potassium of 7.2 mEq/L with peaked T waves on ECG. What is the most appropriate immediate treatment priority?

- A.** Give oral potassium binders alone as the first and only treatment
- B.** Administer IV calcium gluconate immediately to stabilize the cardiac membrane
- C.** Start IV potassium chloride to further evaluate the response
- D.** Administer a beta-blocker as the first-line treatment for this presentation
- E.** Simply repeat the lab in 4 hours before starting any treatment

105. An infant with severe gastroenteritis and poor access to free water has a serum sodium of 165 mEq/L. What is the most appropriate approach to correcting this abnormality?

- A.** Correct the sodium and free water deficit gradually over 48 hours or longer
- B.** Correct the sodium rapidly to normal within the first few hours

- C. Give free water alone as a rapid IV push to correct sodium quickly
- D. Withhold all fluids until the sodium normalizes on its own
- E. Correct using only oral hypertonic saline solution

106. A 12-year-old with new-onset vomiting and abdominal pain has an anion gap metabolic acidosis, with normal renal function and no ketones on urine dip. Which additional history detail would be most useful in narrowing the differential for this anion gap acidosis?

- A. The child's shoe size
- B. A history of seasonal pollen allergies
- C. A history of a specific toxic ingestion (such as methanol)
- D. The exact color of the child's most recent stool
- E. A family history of migraine headaches

107. A 14-year-old presents with tinnitus, hyperventilation, and vomiting after an intentional ingestion. Initial blood gas shows a primary respiratory alkalosis with an early concurrent metabolic acidosis. What ingestion is most consistent with this specific mixed acid-base pattern?

- A. Acetaminophen toxicity
- B. Salicylate (aspirin) toxicity
- C. Isolated benzodiazepine ingestion
- D. Isolated opioid ingestion
- E. Simple ibuprofen ingestion at a modest dose

108. A 9-year-old is recovering on the ward after an appendectomy and reports significant incisional pain despite scheduled acetaminophen. What is the most appropriate next step in a stepwise pain management approach?

- A. Tell the family that postoperative pain does not require any additional treatment beyond acetaminophen
- B. Increase the acetaminophen dose above the recommended maximum to compensate

- C. Add a scheduled or as-needed opioid analgesic to the current regimen for better acute postoperative pain control
- D. Withhold all further analgesia to avoid any risk of opioid exposure regardless of pain severity
- E. Switch to a purely non-pharmacologic approach alone for this level of postoperative pain

109. A 14-year-old with sickle cell disease has recurrent chronic pain crises requiring frequent hospitalization, and the family reports the pain is also affecting school attendance and mood. What is the most appropriate overall approach to her ongoing pain management?

- A. Manage each pain crisis in isolation with no overarching outpatient pain plan between admissions
- B. Assume the pain reports are primarily behavioral and require no medical adjustment to her regimen
- C. A multidisciplinary, individualized chronic pain management plan combining pharmacologic and non-pharmacologic strategies
- D. Use only non-pharmacologic strategies, avoiding any medication adjustment regardless of severity
- E. Refer only for a single one-time pain consultation with no ongoing coordinated plan

110. A hospitalized 6-year-old on a diuretic for volume overload has a potassium of 2.6 mEq/L with associated muscle weakness and a new U wave on ECG. What is the most appropriate management priority?

- A. Begin careful potassium repletion (IV and/or oral as appropriate) with cardiac monitoring
- B. Withhold all potassium repletion because the patient is on a diuretic for volume overload
- C. Treat with calcium gluconate as the primary intervention for this potassium level
- D. Simply discontinue cardiac monitoring since the ECG change is expected and benign
- E. Increase the diuretic dose further while addressing the electrolyte abnormality

111. A 15-year-old is hospitalized after an intentional medication overdose and is now medically stable. What is the most appropriate next step in her inpatient management?

- A.** Discharge home once medically cleared, with only a routine outpatient follow-up appointment scheduled
- B.** Allow unrestricted, unsupervised visitation and normal unit privileges with no additional monitoring
- C.** Manage with reassurance alone, assuming the event was an isolated, low-risk occurrence with no further assessment needed
- D.** Arrange a formal psychiatric evaluation and implement continuous one-to-one safety observation with a thorough environmental safety assessment of the room
- E.** Wait for the family to request psychiatric involvement before arranging any evaluation

112. A 13-year-old is noted to have several superficial cuts on her forearm, which she states were not intended to end her life but were a way of coping with overwhelming feelings. What is the most appropriate next step in her evaluation?

- A.** Conclude immediately that no further risk assessment is needed because she denies suicidal intent
- B.** Avoid asking directly about suicidal thoughts, assuming this could plant the idea
- C.** Assume this behavior is attention-seeking and does not warrant any further clinical attention
- D.** Focus only on wound care with no psychological assessment at all
- E.** Conduct a thorough, direct clinical assessment of both current suicidal ideation/intent and the function of the self-injury

113. A 16-year-old hospitalized patient becomes acutely agitated, is yelling, and appears to be responding to unseen stimuli, posing a risk to himself and staff. What is the most appropriate initial approach?

- A.** Proceed immediately to physical restraint as the first response without attempting de-escalation
- B.** Ignore the behavior entirely and leave the room without any staff intervention
- C.** Attempt verbal de-escalation techniques in a calm, low-stimulation environment before considering any physical or chemical restraint
- D.** Administer a sedating medication immediately without any attempt at verbal de-escalation first
- E.** Increase the number of visitors and environmental stimulation to distract the patient

114. A previously healthy 14-year-old develops acute-onset hallucinations, disorganized speech, and agitation over 2 days, with no prior psychiatric history. What is the most appropriate first step?

- A.** Immediately diagnose a primary psychotic disorder such as schizophrenia without any medical workup
- B.** Start long-term antipsychotic medication as the very first step without any evaluation
- C.** Assume this represents typical adolescent behavior requiring no further evaluation
- D.** Refer directly to outpatient psychiatry without any inpatient medical evaluation
- E.** Pursue a thorough medical workup (including toxicology, metabolic, infectious)

115. A previously cognitively normal 8-year-old, hospitalized for 5 days in the ICU, develops acute fluctuating confusion, disrupted sleep-wake cycle, and inattention. What is the most likely explanation, and what is an appropriate initial step?

- A.** A new primary psychiatric disorder unrelated to the hospitalization, requiring psychiatric admission
- B.** Normal behavior for any hospitalized child, requiring no further evaluation
- C.** A definite sign of non-accidental trauma requiring an immediate abuse workup as the first step
- D.** An expected medication side effect that should be ignored without further assessment
- E.** Pediatric delirium, warranting evaluation and correction of contributing factors (such as sleep disruption, pain, sedating medications)

116. A hospitalized 10-year-old with fluctuating attention and disorientation is being evaluated. Which feature would most support delirium over a primary psychiatric illness as the cause?

- A.** An acute onset with a fluctuating course over hours, closely tied to an identifiable medical illness or ICU admission
- B.** A gradual onset over many months with a stable, unchanging clinical picture
- C.** A strong family history of a specific primary psychiatric disorder
- D.** Symptoms that are present identically regardless of time of day or medical status
- E.** Full orientation to person, place, and time throughout the entire hospitalization

117. A 12-year-old develops sudden inability to move her legs after a stressful family event, with a normal neurologic exam, normal reflexes, and inconsistent findings on formal strength testing. What is the most appropriate next step?

- A.** Pursue an appropriately thorough medical workup to exclude an organic cause
- B.** Immediately tell the family the symptoms are 'not real' and discharge without further evaluation
- C.** Skip any medical workup entirely and proceed straight to long-term psychiatric hospitalization
- D.** Assume malingering for secondary gain without any further clinical assessment
- E.** Order an extensive, repeated battery of invasive testing indefinitely despite a reassuring initial workup

118. A 9-year-old has recurrent abdominal pain over 3 months, with a thorough history, exam, and initial basic labs all unremarkable, and pain that seems to worsen around school-related stress. What is the most appropriate framework for ongoing management?

- A.** Assume the pain is entirely fabricated and requires no further clinical attention or support
- B.** Immediately pursue exploratory abdominal surgery given the recurrent nature of the pain
- C.** Repeat the full battery of extensive invasive tests every few weeks indefinitely
- D.** Attribute the pain solely to the child seeking to avoid school with no further clinical engagement
- E.** A functional abdominal pain diagnosis, managed with a biopsychosocial approach addressing both physical symptoms and contributing stressors

119. An 8-year-old with autism spectrum disorder is hospitalized for a medical illness and becomes increasingly distressed by the unfamiliar environment and changes in routine. What is the most appropriate approach to his care?

- A.** Apply an identical, unmodified standard care approach with no individualized accommodations
- B.** Sedate the child as the first-line strategy for any distress rather than trying environmental or behavioral accommodations first
- C.** Exclude the family/caregivers from involvement in his care during the hospitalization
- D.** Assume that all distressed behavior in this context reflects a primary psychiatric emergency requiring psychiatric transfer

E. Individualize the care plan with structured routines, sensory accommodations, and family/caregiver involvement to reduce distress and support cooperation with care

120. A 9-year-old with ADHD, normally on a stimulant medication, is hospitalized for an unrelated acute illness. What is the most appropriate approach to his home medication during this admission?

A. Automatically discontinue all home medications for every hospitalized child regardless of clinical context

B. Review the home stimulant medication in the context of the current admission

C. Increase the stimulant dose during the acute illness without any clinical indication to do so

D. Assume the ADHD diagnosis is no longer relevant during a hospitalization for an unrelated illness and stop addressing it entirely

E. Substitute an unrelated sedating medication in place of his home stimulant without clinical reason

121. A 15-year-old with a history of restrictive eating and significant recent weight loss is admitted for medical stabilization. As nutritional rehabilitation begins, what electrolyte complication should be most closely monitored for?

A. Hypercalcemia as the primary expected complication of refeeding

B. Refeeding syndrome, particularly hypophosphatemia

C. Hyperkalemia as the primary expected complication of refeeding

D. Hyponatremia as the primary expected complication of refeeding

E. Hyperphosphatemia as the primary expected complication of refeeding

122. A 16-year-old with a restrictive eating disorder has a heart rate of 38 bpm, orthostatic blood pressure changes, and a body weight significantly below expected for height. What is the most appropriate level of care recommendation?

A. Outpatient management alone with no change in the current level of care

B. Discharge home with only a routine outpatient follow-up appointment in several weeks

C. Recommend intensive outpatient therapy alone as sufficient given the current findings

- D.** Manage with reassurance alone since the patient is currently alert and conversant
- E.** Inpatient medical hospitalization for stabilization, given the significant bradycardia and orthostatic instability

123. A term newborn is delivered and is limp, apneic, and has a heart rate of 70 bpm despite initial drying and stimulation. What is the most appropriate next step in neonatal resuscitation?

- A.** Continue only drying and stimulation without any additional intervention
- B.** Begin chest compressions before attempting positive pressure ventilation
- C.** Administer epinephrine as the first intervention before any ventilation attempt
- D.** Begin positive pressure ventilation promptly
- E.** Delay any intervention until a full 5-minute Apgar score is calculated

124. A term newborn is delivered through thick, particulate meconium-stained amniotic fluid and is vigorous, crying, with good tone and a strong heart rate immediately after birth. What is the most appropriate management?

- A.** Perform immediate tracheal intubation and suctioning regardless of how vigorous the infant appears
- B.** Proceed with routine newborn care, since the infant is vigorous, without performing immediate tracheal suctioning
- C.** Delay all newborn care for several hours to observe for symptoms before any assessment
- D.** Perform vigorous oropharyngeal suctioning before the infant takes any breaths, regardless of vigor
- E.** Withhold all supplemental oxygen indefinitely regardless of the infant's respiratory status

125. An infant of a diabetic mother has a blood glucose of 28 mg/dL at 1 hour of life, with jitteriness but is otherwise feeding. What is the most appropriate initial management?

- A.** Give a large IV dextrose bolus as the mandatory first step in every case regardless of feeding ability

- B.** Withhold all feeding and glucose monitoring since infants of diabetic mothers rarely have real hypoglycemia
- C.** Discharge home immediately with no further monitoring given a single low reading
- D.** Treat only with reassurance and no intervention despite the jitteriness and low glucose value
- E.** Attempt oral/enteral feeding first if the infant is stable enough, with close glucose monitoring

126. A term newborn at 60 hours of life has a total serum bilirubin that plots in the high-risk zone on the hour-specific nomogram, with no evidence of hemolysis. What is the most appropriate next step?

- A.** Initiate phototherapy based on the hour-specific bilirubin threshold and risk factors
- B.** Discharge home with no treatment and only a routine 2-week well-child follow-up
- C.** Proceed directly to exchange transfusion without first attempting phototherapy
- D.** Recommend stopping breastfeeding entirely and switching to formula as the primary treatment
- E.** Treat with oral antibiotics for a presumed infectious cause of the jaundice

127. A term newborn delivered by scheduled cesarean section develops mild tachypnea and grunting shortly after birth, with a chest x-ray showing perihilar streaking and fluid in the fissures, and the symptoms are improving by 12 hours of age. What is the most likely diagnosis?

- A.** Respiratory distress syndrome from surfactant deficiency
- B.** Neonatal pneumonia
- C.** Meconium aspiration syndrome
- D.** Transient tachypnea of the newborn
- E.** Congenital diaphragmatic hernia

128. A term newborn has severe hypoxemia out of proportion to the degree of lung disease on chest x-ray, with differential cyanosis (lower saturation in the legs than the right hand) and echocardiography showing elevated pulmonary pressures with right-to-left shunting but no structural heart defect. What is the most likely diagnosis?

- A.** Persistent pulmonary hypertension of the newborn

- B.** Simple transient tachypnea of the newborn
- C.** A cyanotic structural congenital heart defect
- D.** Choanal atresia
- E.** Diaphragmatic eventration without pulmonary hypertension

129. A newborn is delivered to a mother with an unknown group B Streptococcus status and inadequate intrapartum antibiotic prophylaxis, but the infant appears entirely well at birth. Using standard risk-based approaches, what is the most appropriate management?

- A.** No further evaluation or observation is needed since the infant currently looks well
- B.** Use a validated risk-assessment approach combining exam findings and risk factors to guide evaluation
- C.** Automatically start empiric antibiotics in every well-appearing infant regardless of risk factors or exam
- D.** Discharge home immediately with no additional monitoring given the reassuring appearance
- E.** Wait until the infant becomes clinically ill before considering any risk-based evaluation

130. A term newborn develops temperature instability, poor feeding, and lethargy at 18 hours of life, with a maternal history of untreated GBS colonization. What is the most appropriate empiric antibiotic approach while awaiting culture results?

- A.** Oral amoxicillin alone as outpatient therapy
- B.** A single dose of an oral macrolide antibiotic with no further treatment
- C.** Vancomycin monotherapy alone as first-line coverage
- D.** Ampicillin plus an aminoglycoside as standard empiric coverage for early-onset neonatal sepsis
- E.** No antibiotics until blood culture results return, given the symptoms could resolve spontaneously

131. A late preterm infant (35 weeks gestation) is being evaluated prior to discharge. Which combination of risks is most specifically elevated in this gestational age group compared with a full-term infant?

- A.** Feeding difficulties, temperature instability, and hyperbilirubinemia, given relative physiologic immaturity
- B.** Congenital heart disease risk specifically tied to this gestational age range
- C.** Risk of a primary autoimmune disorder specifically tied to this gestational age range
- D.** Increased risk of a specific inherited metabolic disorder tied to this gestational age range
- E.** Risk of a specific chromosomal abnormality tied to this gestational age range

132. A newborn of a mother with a documented history of opioid use during pregnancy is being monitored for signs of withdrawal. Which finding would most specifically indicate a significant withdrawal syndrome requiring pharmacologic treatment?

- A.** A single mildly elevated score on a standardized tool with the infant otherwise feeding and sleeping well
- B.** Normal newborn reflexes with no additional symptoms
- C.** A pattern of high, worsening withdrawal scores on a standardized scoring tool, along with poor feeding
- D.** A brief, isolated sneeze noted once during the exam
- E.** Age-appropriate newborn sleep patterns with no other findings

133. A newborn with confirmed neonatal abstinence syndrome has consistently high withdrawal scores on a standardized tool despite optimized non-pharmacologic supportive care (swaddling, low stimulation, frequent small feeds). What is the most appropriate next step?

- A.** Continue non-pharmacologic care alone indefinitely despite the consistently high scores
- B.** Discharge home regardless of the ongoing high withdrawal scores
- C.** Begin an unrelated sedative medication with no specific role in treating opioid withdrawal
- D.** Initiate pharmacologic treatment (such as an opioid replacement regimen) per standardized protocol
- E.** Withhold all further intervention since symptoms will resolve entirely on their own without any treatment

134. A macrosomic newborn delivered after a difficult vaginal delivery with shoulder dystocia has decreased movement of the right arm, which is held in an adducted, internally rotated position with the wrist flexed. What is the most likely diagnosis?

- A.** Erb palsy (upper brachial plexus injury) from birth trauma
- B.** A congenital upper limb malformation unrelated to the delivery
- C.** Simple newborn hypotonia unrelated to the delivery
- D.** Klumpke palsy (lower brachial plexus injury)
- E.** A normal newborn reflex pattern requiring no further evaluation

135. A newborn with an isolated cleft palate (without cleft lip) is having significant difficulty generating adequate suction during breastfeeding attempts, with poor weight gain. What is the most appropriate feeding approach?

- A.** Insist on exclusive breastfeeding only, with no consideration of specialized feeding equipment
- B.** Use specialized feeding techniques and equipment (such as cleft palate bottles/nipples) with close weight monitoring
- C.** Withhold all oral feeding attempts and rely solely on IV fluids indefinitely
- D.** Assume feeding difficulty in cleft palate infants is not a real clinical issue requiring no intervention
- E.** Use only a standard, unmodified bottle nipple with no specialized adaptation

136. A newborn develops significant respiratory distress shortly after birth, with a scaphoid (sunken) abdomen, decreased breath sounds on the left, and bowel sounds auscultated in the chest. What is the most likely diagnosis?

- A.** Congenital diaphragmatic hernia
- B.** Simple transient tachypnea of the newborn
- C.** Meconium aspiration syndrome without a diaphragmatic defect
- D.** Choanal atresia
- E.** Tracheoesophageal fistula without diaphragmatic involvement

137. A 4-day-old exclusively breastfed newborn has lost 9% of birth weight, with a mother reporting difficulty with latch and infrequent audible swallowing during feeds. What is the most appropriate next step?

- A.** Reassure the family that this degree of weight loss is always normal and requires no further evaluation or support
- B.** Immediately and permanently discontinue all breastfeeding without further evaluation or support
- C.** Arrange a formal breastfeeding evaluation (such as with a lactation consultant), assess latch and milk transfer
- D.** Delay any evaluation or intervention until the 2-week well-child visit
- E.** Assume the infant simply has a low overall caloric requirement with no further assessment needed

138. A formula-fed 3-week-old has frequent non-bloody, non-bilious spit-up after most feeds but is gaining weight well, feeding vigorously, and has no respiratory symptoms or apparent distress. What is the most appropriate management approach?

- A.** Start acid-suppressing medication immediately as the first-line treatment for this presentation
- B.** Reassure the family that this is likely uncomplicated physiologic reflux, providing conservative feeding guidance
- C.** Recommend an emergent upper GI series before any conservative management is attempted
- D.** Advise immediate discontinuation of all oral feeding given the reported spit-up
- E.** Refer urgently for surgical evaluation without first considering conservative management

139. A 7-year-old with cerebral palsy and significant spasticity is hospitalized, and the family reports worsening muscle tightness is interfering with positioning, hygiene, and comfort. What is the most appropriate general approach to management?

- A.** Proceed directly to an invasive surgical intervention as the first step regardless of severity
- B.** Assume nothing can be done to help spasticity-related discomfort and provide no intervention
- C.** A stepwise approach starting with the least invasive effective measures (positioning, physical therapy, oral antispasmodic medication)
- D.** Use only sedating medication with no attention to positioning or physical therapy approaches

E. Ignore the family's report since spasticity is expected and requires no reassessment during hospitalization

140. A 9-year-old with severe neurologic impairment has significant sialorrhea (drooling) causing skin breakdown and aspiration risk. What is the most appropriate initial management approach?

A. Consider anticholinergic medication or other targeted pharmacologic therapy for sialorrhea, alongside supportive skin care, after evaluating severity and impact

B. Assume sialorrhea is simply a fixed feature of the underlying condition and pursue no intervention regardless of severity or complications

C. Proceed immediately to permanent surgical salivary gland removal as the mandatory first-line approach

D. Restrict all oral intake entirely as the only way to reduce secretions

E. Ignore the associated skin breakdown and aspiration risk since they are considered unrelated to the drooling

141. A 6-year-old with a gastrostomy tube for feeding due to a neurologic condition is being evaluated for adequacy of nutrition. What is the most appropriate framework for assessing his caloric needs?

A. Use only a standard age-based caloric estimate identical to that used for a fully mobile, typically developing child of the same age

B. Assume caloric needs are irrelevant once a gastrostomy tube is in place

C. Individualized caloric needs assessment accounting for his reduced activity level, growth pattern, and specific underlying condition

D. Provide a fixed caloric intake without any monitoring of growth or reassessment over time

E. Base caloric needs solely on the tube's maximum flow rate rather than the child's actual physiologic needs

142. An infant with a complex congenital anomaly is expected to need supplemental enteral feeding for an anticipated short duration (a few weeks) while awaiting a planned surgical repair. What is the most appropriate feeding access choice for this anticipated duration?

A. Immediate surgical gastrostomy tube placement regardless of the anticipated short duration of need

- B.** Total parenteral nutrition as the default choice for any temporary feeding need regardless of gut function
- C.** No enteral or supplemental nutritional support at all while awaiting surgery
- D.** A permanent jejunostomy tube as the default choice for any temporary feeding need
- E.** A nasogastric tube, which is appropriate for anticipated short-term feeding needs

143. A child with a tracheostomy tube suddenly develops increased work of breathing, decreased air movement through the tube, and desaturation. What is the most appropriate immediate step?

- A.** Immediately remove the tracheostomy tube entirely with no plan for replacement or alternative airway management
- B.** Wait several hours to see if the symptoms resolve spontaneously before taking any action
- C.** Administer oral antibiotics as the first and only intervention for this acute presentation
- D.** Attempt suctioning of the tracheostomy tube first to clear a possible mucus plug
- E.** Increase supplemental oxygen flow alone without addressing the possible tube obstruction

144. A child with a ventriculoperitoneal shunt for hydrocephalus develops headache, vomiting, and increasing lethargy over the past day. What is the most appropriate next step?

- A.** Manage as a simple viral gastroenteritis with oral rehydration alone and no further workup
- B.** Urgent evaluation for shunt malfunction, including neuroimaging and neurosurgical consultation
- C.** Discharge home with reassurance and a routine follow-up appointment in several weeks
- D.** Treat with oral analgesics alone for a presumed simple tension headache
- E.** Assume this represents normal, expected shunt function requiring no evaluation

145. A child with medical complexity is on multiple medications prescribed by several different specialists. On hospital admission, a new medication is being considered that has a known significant interaction with one of her existing home medications. What is the most appropriate step before starting the new medication?

- A.** Start the new medication immediately without reviewing her existing medication list

- B.** Discontinue all of her existing home medications simultaneously to avoid any possible interaction
- C.** Perform a thorough medication reconciliation and interaction review
- D.** Assume that specialists have already fully coordinated all medications with no need for further review at this admission
- E.** Choose the new medication based solely on convenience without considering the known interaction

146. A child with a gastrostomy tube is prescribed an extended-release oral medication that needs to be given via the tube. What is the most appropriate approach regarding this medication's formulation?

- A.** Crush the extended-release tablet and administer it via the tube without checking whether this is safe for that specific formulation
- B.** Assume all oral medications, regardless of formulation, are automatically safe to crush for tube administration
- C.** Simply skip the medication entirely rather than considering an appropriate alternative formulation
- D.** Verify whether the specific extended-release formulation is safe to crush or otherwise alter for tube administration
- E.** Double the dose of a crushed extended-release tablet to compensate for anticipated loss during tube administration

147. A child with medical complexity, including a tracheostomy and gastrostomy tube, is being prepared for hospital discharge. What is the most appropriate approach to ensure a safe transition home?

- A.** Discharge home as soon as the acute medical issue has resolved, without any additional caregiver education or equipment verification
- B.** Assume the family already knows everything needed about the child's devices with no further teaching or verification
- C.** A coordinated, multidisciplinary discharge process including caregiver education and competency verification on device care, confirmed equipment and supply arrangements
- D.** Discharge without confirming home nursing, equipment, or supply arrangements are actually in place

E. Skip establishing any follow-up or emergency plan since the acute hospitalization issue has resolved

148. A child with a complex underlying genetic condition is followed by cardiology, nephrology, and neurology, each of whom has made a separate recommendation during this hospitalization that has some overlap and potential conflict. What is the most appropriate approach to coordinating this care?

A. Facilitate direct communication and coordination among the involved specialists, often through the primary hospitalist/attending team, to develop a single, coherent

B. Simply implement all recommendations exactly as given regardless of any overlap or conflict between them

C. Let the family independently reconcile the conflicting specialist recommendations without further involvement from the care team

D. Follow only the most recently given recommendation without any further coordination among the specialists

E. Ignore the conflicting recommendations entirely and proceed with a plan not informed by any of the specialist input

149. A family of a child with a life-limiting neurodegenerative condition is meeting with the medical team to discuss goals of care as the disease progresses. What is the most appropriate approach to this conversation?

A. Avoid discussing prognosis or goals of care entirely to prevent causing the family distress

B. An open, honest, and compassionate discussion exploring the family's values, understanding, and goals

C. Present only one predetermined treatment pathway without exploring the family's own values or questions

D. Delay any goals-of-care conversation indefinitely until a medical crisis forces the discussion

E. Make all care decisions for the family without soliciting or incorporating their input

150. A child receiving palliative care for a life-limiting condition has increasing pain that is not well controlled on the current regimen. What is the most appropriate approach to symptom management?

- A.** Reassess and adjust the pain management regimen based on the child's current symptoms, using an individualized, often multimodal approach aimed at comfort
- B.** Avoid adjusting the pain regimen due to concerns about medication use in this context, regardless of the child's ongoing discomfort
- C.** Assume nothing more can be done for pain once a child is receiving palliative care
- D.** Use only non-pharmacologic comfort measures, declining to adjust or add any medication regardless of symptom severity
- E.** Wait for the family to specifically request medication changes before reassessing the regimen

151. A 6-year-old with suspected bacterial meningitis has papilledema and a focal neurologic deficit on exam. What is the most appropriate approach regarding lumbar puncture?

- A.** Proceed with lumbar puncture immediately regardless of the papilledema and focal deficit
- B.** Obtain neuroimaging before lumbar puncture given signs suggesting possible elevated intracranial pressure
- C.** Delay both antibiotics and lumbar puncture until neuroimaging is completed, whenever that may be
- D.** Skip lumbar puncture entirely and rely on blood cultures alone for diagnosis
- E.** Perform lumbar puncture immediately but withhold antibiotics until the LP is completed

152. A critically ill 2-year-old in shock has no rapidly obtainable peripheral IV access after several attempts. What is the most appropriate next step for obtaining emergency vascular access?

- A.** Place an intraosseous line immediately for emergent vascular access when peripheral attempts have failed
- B.** Continue repeated peripheral IV attempts indefinitely with no time limit before considering alternatives
- C.** Delay all fluid and medication administration until a central line can be placed by a specialist team
- D.** Attempt only oral rehydration as a substitute for IV access in this critically ill child
- E.** Wait for the child's condition to stabilize on its own before attempting any further vascular access

153. A 5-year-old is scheduled for procedural sedation for a fracture reduction. What is the most important step in the pre-sedation assessment?

- A.** Proceed with sedation immediately without any pre-sedation assessment given the urgency of the fracture
- B.** Assume all children are equally appropriate candidates for the same sedation approach regardless of individual risk factors
- C.** Review NPO (fasting) status, airway anatomy, and relevant medical history/risk factors to determine sedation candidacy and appropriate monitoring level
- D.** Skip any airway assessment since procedural sedation does not carry airway risk
- E.** Rely solely on the child's chronological age to determine sedation safety, without considering other individual risk factors

154. A hospitalized child requires precise monitoring of urine output due to critical illness, and is currently unable to reliably void into a collection device due to altered mental status. What is the most appropriate method to obtain accurate urine output monitoring?

- A.** Rely on estimated urine output based on diaper weight changes alone despite the need for precise monitoring in a critically ill child
- B.** Avoid any urine output monitoring since the child cannot reliably void into a collection device
- C.** Use only intermittent spot checks of serum creatinine as a complete substitute for urine output monitoring
- D.** Place an indwelling urinary catheter for accurate, continuous urine output measurement
- E.** Delay urine output monitoring until the child's mental status improves enough to void independently

155. A child with a chest injury suddenly develops severe respiratory distress, absent breath sounds on one side, tracheal deviation, and hypotension. What is the most appropriate immediate intervention?

- A.** Obtain a chest x-ray first to confirm the diagnosis before any intervention
- B.** Administer IV fluids alone without addressing the chest findings
- C.** Wait for the results of an arterial blood gas before intervening
- D.** Place a formal chest tube as the very first step before any needle decompression

E. Immediate needle thoracostomy (decompression) for suspected tension pneumothorax

156. A child with a well-established gastrostomy tract has the gastrostomy tube accidentally dislodged at home, and the family arrives within an hour with the stoma still visibly open. What is the most appropriate immediate management?

- A.** Wait several days before attempting to replace anything, allowing the stoma to close completely on its own
- B.** Simply discard the situation and plan for a fully new elective surgical tract creation regardless of tract maturity
- C.** Attempt prompt replacement of the tube (or a temporary catheter if the specific tube is unavailable) to maintain stoma patency
- D.** Ignore the dislodgement since gastrostomy tracts do not close without intervention
- E.** Attempt oral feeding exclusively going forward with no plan to restore tube access

157. A family strongly disagrees with the medical team's recommended treatment plan for their hospitalized child, and communication has become tense. What is the most appropriate approach to resolving this conflict?

- A.** Engage in active listening to understand the family's specific concerns and values, and work collaboratively toward a shared decision
- B.** Insist on the original plan exactly as proposed with no further discussion of the family's concerns
- C.** Immediately involve hospital security or law enforcement as the first response to family disagreement
- D.** Discharge the family from care without further attempts at communication or resolution
- E.** Simply document the disagreement and take no further steps to engage with the family's concerns

158. A family whose primary language is not English is receiving important information about their child's diagnosis and treatment plan. What is the most appropriate approach to this communication?

- A.** Rely on a young sibling of the patient to interpret complex medical information
- B.** Use only written English materials with no interpretation support at all

- C. Communicate using simplified gestures alone without any language interpretation
- D. Use a qualified professional medical interpreter (in person or via a reliable interpretation service) to ensure accurate
- E. Skip detailed information sharing entirely because of the language barrier

159. A family with limited health literacy is being given discharge instructions for their child's new medication regimen involving several different medications with different schedules. What is the most appropriate approach to ensure understanding?

- A. Provide only complex medical terminology exactly as documented in the chart, with no simplification
- B. Use clear, plain language, teach-back techniques, and simplified written materials (such as a written schedule) to confirm and support understanding
- C. Assume understanding based on the family nodding along, without using any teach-back or confirmation method
- D. Give verbal instructions only with no written materials to reference at home
- E. Rush through the instructions quickly to save time regardless of the family's apparent understanding

160. During family-centered rounds, the team is discussing a hospitalized child's case at the bedside. What is the most appropriate approach to including the family in this process?

- A. Conduct all substantive discussion about the case outside the room, informing the family only of the final decision afterward
- B. Use only technical medical jargon throughout rounds with no adaptation for family understanding
- C. Discourage the family from asking questions during rounds to keep the discussion moving quickly
- D. Exclude the family from bedside rounds by default, offering updates only through more limited written summaries
- E. Actively invite and incorporate the family's observations, questions, and preferences into the discussion, using language they can understand throughout rounds

161. A hospitalist is handing off a complex patient to the overnight covering physician at shift change. What is the most appropriate approach to this handoff communication?

- A.** Use a structured handoff format covering the patient's current status, active issues, anticipated problems
- B.** Provide only a brief patient name and room number with no further clinical details
- C.** Communicate solely through the written chart with no verbal discussion at all
- D.** Skip mentioning any anticipated overnight issues or contingency plans
- E.** Rush through the handoff without allowing any opportunity for the receiving physician to ask clarifying questions

162. A child with a mild, self-limited viral illness and reassuring vital signs is being evaluated for the appropriate level of care. What is the most appropriate triage disposition?

- A.** Outpatient management with supportive care and clear return precautions, reserving hospitalization for more significant illness or specific risk factors
- B.** Automatic hospital admission for every child with any viral illness regardless of severity
- C.** Immediate transfer to a tertiary pediatric intensive care unit regardless of clinical severity
- D.** No follow-up guidance or return precautions of any kind given the mild presentation
- E.** Admission to a step-down unit reserved specifically for critically ill children, regardless of this child's mild presentation

163. A critically ill child at a community hospital needs transfer to a tertiary children's hospital for a higher level of care. What is the most appropriate priority before and during transport?

- A.** Transport the child immediately with no attempt at stabilization at the sending facility
- B.** Use standard non-specialized transport with no attention to the level of monitoring or personnel needed during transit
- C.** Delay transport indefinitely until the child is completely free of any ongoing medical needs
- D.** Prioritize transport speed alone, with no consideration of the child's ongoing physiologic stability during transit

E. Stabilize the child as much as possible prior to transport, using appropriately trained personnel and equipment

164. A child is being discharged from the hospital after a complicated admission, with several new medications and a need for outpatient follow-up testing. What is the most appropriate approach to communicating with the child's primary care provider?

- A. Provide no communication to the primary care provider, relying solely on the family to relay all information accurately
- B. Send only the child's name and discharge date with no further clinical details
- C. Delay sending any discharge summary for several months after the discharge date
- D. Provide a timely, detailed discharge summary to the primary care provider
- E. Assume the primary care provider does not need to know about any pending test results at the time of discharge

165. A hospitalist wants to reduce the rate of missed medication reconciliation errors at admission on a pediatric hospital medicine unit. She plans to test a single change (a structured reconciliation form) with one resident team over one week, then review the results before deciding whether to expand it. Which quality improvement methodology does this represent?

- A. A randomized controlled trial, since an intervention is being tested against a control condition
- B. A Plan-Do-Study-Act (PDSA) cycle, using a small-scale test of change before broader implementation
- C. A retrospective cohort study examining outcomes after the fact
- D. A cross-sectional survey of provider attitudes toward medication reconciliation
- E. A case-control study comparing patients with and without reconciliation errors

166. A hospital adopts the I-PASS framework for resident sign-out to reduce handoff-related errors. What is the primary mechanism by which I-PASS is thought to reduce adverse events during transitions of care?

- A. It standardizes the content and structure of verbal and written handoff communication
- B. It eliminates the need for verbal handoff communication between providers entirely

- C. It shifts all responsibility for patient safety onto the incoming provider alone
- D. It replaces the need for a written sign-out document with verbal communication only
- E. It is primarily intended to shorten the total time spent on handoff, with error reduction as an incidental effect

167. After a wrong-patient medication error occurs on the inpatient unit, the hospital convenes a multidisciplinary team to systematically identify the underlying process failures that allowed the error to occur, rather than focusing on the individual staff member involved. What is this systematic process called?

- A. Root cause analysis, a structured method for identifying underlying system contributors to an adverse event
- B. Peer review, which is intended to evaluate an individual clinician's competence
- C. Morbidity and mortality conference, which is primarily an educational case-based discussion
- D. Incident reporting, which is the initial documentation of the event rather than its systematic analysis
- E. Disciplinary review, which is focused on determining appropriate consequences for the individual involved

168. A hospital is redesigning its error-reporting system to encourage staff to report near-misses and safety events without fear of punitive consequences for honest mistakes, while still holding individuals accountable for reckless or intentional unsafe behavior. What safety culture model does this represent?

- A. A blame-free culture, in which no individual is ever held accountable for any action regardless of intent
- B. A punitive culture, in which all errors result in disciplinary action regardless of circumstances
- C. An autonomous culture, in which individual staff members are solely responsible for identifying and correcting their own errors without system-level review
- D. A hierarchical culture, in which only senior staff are permitted to report safety concerns
- E. A just culture, which distinguishes human error and at-risk behavior from reckless behavior in determining accountability

169. A pediatric hospital medicine division implements a standardized order set for the admission of patients with uncomplicated bronchiolitis, replacing individualized free-text orders. What is the primary patient safety rationale for this type of standardization?

- A.** Standardized order sets are intended primarily to reduce hospital costs, with safety being an unrelated secondary consideration
- B.** Standardized order sets eliminate the need for individualized clinical judgment in every case
- C.** Standardized order sets reduce unwarranted practice variation and decrease the likelihood of errors of omission or commission compared with individualized free-text ordering
- D.** Standardized order sets are required primarily to satisfy hospital billing and coding requirements
- E.** Standardized order sets are used mainly to reduce the time physicians spend documenting, with no direct effect on safety

170. A hospital's rate of central line-associated bloodstream infections (CLABSI) on the pediatric unit decreases substantially after implementation of a standardized insertion and maintenance bundle. What best describes the mechanism behind this type of intervention?

- A.** The bundle works because any single component alone, if performed reliably, is sufficient to prevent essentially all central line infections
- B.** The bundle primarily functions by reducing the total number of central lines placed, regardless of adherence to insertion technique
- C.** The bundle's effectiveness is unrelated to consistent staff adherence and depends mainly on the specific catheter material used
- D.** Bundling several individually evidence-based practices (such as maximal sterile barrier precautions, chlorhexidine skin antisepsis)
- E.** The bundle works by transferring responsibility for infection prevention entirely to the infection control department rather than bedside staff

171. A hospitalist admits a child with several days of intermittent abdominal pain and initially attributes the presentation to constipation based on the chief complaint alone, without fully considering other diagnoses, delaying recognition of an alternative diagnosis that better fit the overall clinical picture. This scenario primarily illustrates which type of contributor to diagnostic error?

- A.** A pure knowledge deficit, in which the clinician was unaware that the correct diagnosis existed as a clinical entity

- B.** A system-level equipment failure, such as a malfunctioning diagnostic device
- C.** Anchoring bias, fixating on an initial impression without adequately adjusting to new information
- D.** A communication failure between two different care teams
- E.** A medication administration error unrelated to the diagnostic process

172. A hospital implements a formal medication reconciliation process at admission, transfer, and discharge, in which a pharmacist or trained provider systematically compares the patient's pre-admission medication list against newly ordered medications at each transition. What is the primary patient safety benefit of this process?

- A.** It reduces the risk of adverse drug events caused by unintentional medication discrepancies
- B.** It is primarily intended to reduce pharmacy department staffing costs rather than to improve patient safety
- C.** It eliminates the need for any further medication review once a patient reaches the outpatient setting
- D.** It is required primarily to satisfy insurance prior-authorization requirements rather than to prevent errors
- E.** It is effective only at the time of discharge and provides no safety benefit at admission or internal transfer

173. A previously healthy infant is hospitalized with straightforward bronchiolitis, has a normal respiratory exam other than mild retractions, and is maintaining oxygen saturations without supplemental oxygen. A resident asks whether a chest radiograph should be ordered to confirm the diagnosis. What is the most evidence-based response?

- A.** A chest radiograph should be obtained routinely in every hospitalized case of bronchiolitis to confirm the diagnosis before treatment can begin
- B.** A chest radiograph is required by regulatory standards for all pediatric hospital admissions regardless of diagnosis
- C.** A chest radiograph should be avoided in bronchiolitis under all circumstances, including in infants with an atypical or severe presentation

D. A chest radiograph is not routinely indicated in typical bronchiolitis, since the diagnosis is clinical and imaging may prompt unnecessary antibiotics

E. A chest radiograph should be ordered primarily to reassure the family, independent of any clinical indication

174. A child hospitalized with bronchiolitis has improved clinically, is feeding well, and has been maintaining oxygen saturations above the target threshold on room air for the past 12 hours. The nursing team asks whether continuous pulse oximetry monitoring should continue. What is the most evidence-based response?

A. Continuous pulse oximetry monitoring must be maintained for the entire hospitalization regardless of clinical trajectory

B. Continuous pulse oximetry should be discontinued immediately upon admission for all bronchiolitis patients, even those requiring supplemental oxygen

C. The decision to discontinue continuous monitoring should be based solely on parental preference rather than clinical status

D. Continuous pulse oximetry can reasonably be discontinued in favor of intermittent spot-checks

E. Continuous pulse oximetry has no role at any point during a bronchiolitis admission and should never be used

175. A hospitalized child with a stable, resolving illness has daily complete blood counts and basic metabolic panels ordered by default as part of a long-standing unit habit, without a specific clinical question the results are meant to answer. What is the most appropriate high-value care approach?

A. Daily laboratory testing should continue automatically for all hospitalized patients regardless of clinical trajectory, since more data is always beneficial

B. Laboratory testing should be ordered based on a specific clinical question relevant to the patient's current status, and repeat testing without such an indication should be discontinued

C. Laboratory testing should be eliminated entirely for all hospitalized patients regardless of clinical indication

D. The decision to order daily labs should be left entirely to nursing staff rather than being addressed by the medical team

E. Daily labs should continue unchanged specifically because discontinuing an established unit habit could be interpreted as inadequate monitoring

176. A previously healthy child is diagnosed with uncomplicated community-acquired pneumonia and started on an appropriate oral antibiotic, with clear clinical improvement over the following days. What does current evidence-based guidance support regarding antibiotic duration in this scenario?

- A.** Antibiotic duration should always be extended to a minimum of 14 days for uncomplicated pneumonia regardless of clinical response
- B.** Antibiotic duration has no evidence base and should be left entirely to individual physician preference without regard to published data
- C.** A shorter antibiotic course (commonly 5 days in current pediatric guidance for appropriately selected
- D.** Antibiotics should be discontinued after only a single dose once any clinical improvement is observed
- E.** Antibiotic duration should be determined solely by the family's preference regarding length of therapy

177. A clinical trial reports that a particular intervention has a number needed to treat (NNT) of 20 to prevent one additional adverse outcome. How should a hospitalist most appropriately interpret this statistic when counseling a family?

- A.** The intervention will prevent the adverse outcome in exactly 20% of all patients who receive it
- B.** On average, 20 patients would need to receive the intervention for one additional adverse outcome to be prevented
- C.** The intervention is proven to be ineffective, since an NNT greater than 1 indicates the treatment does not work
- D.** Twenty patients must receive the intervention before it can begin working in any of them
- E.** The NNT describes the number of patients who will experience a side effect from the intervention

178. A newly proposed rapid diagnostic test for a serious infection has a reported sensitivity of 98% and specificity of 70%. Which statement most accurately reflects the clinical implication of these test characteristics?

- A.** The test is equally well-suited to both rule in and rule out the condition, since sensitivity and specificity have identical clinical implications

- B.** A positive result on this test can be considered essentially diagnostic of the condition without further evaluation, given its high sensitivity
- C.** The test is well-suited to rule out the condition when negative, given its high sensitivity, but has a relatively high false-positive rate given its lower specificity
- D.** The test's specificity of 70% means 70% of all patients tested will have a positive result
- E.** Sensitivity and specificity for this test are determined by prevalence of the condition in the population being tested

179. A child hospitalized with a suspected bacterial infection is initially started on broad-spectrum empiric antibiotics. Culture results return 48 hours later identifying a pathogen that is fully susceptible to a narrower-spectrum agent. What is the most appropriate next step from a high-value, antimicrobial stewardship perspective?

- A.** Continue the original broad-spectrum antibiotic for the remainder of therapy regardless of culture results, since it was already working clinically
- B.** Discontinue all antibiotic therapy immediately once any culture result becomes available, regardless of clinical status
- C.** De-escalate therapy to the narrowest effective antibiotic based on culture and susceptibility results, provided the patient is clinically improving
- D.** Add an additional broad-spectrum agent on top of the current antibiotic once susceptibility results are known
- E.** Antibiotic selection should not be adjusted based on culture results if the patient has shown any clinical improvement on the empiric regimen

180. Two oral antibiotic formulations are considered equally effective and equally well-tolerated for a given pediatric infection, but one is substantially less expensive than the other. From a high-value care perspective, what is the most appropriate approach to selecting between them?

- A.** Always select the more expensive option, since higher cost is generally assumed to reflect higher quality regardless of comparative effectiveness data
- B.** Cost should never be considered when selecting between two treatment options under any circumstances
- C.** The choice between the two options should be based on which one is more novel, independent of comparative effectiveness or cost data

- D.** The more expensive option should be selected specifically to maximize hospital revenue
- E.** Prefer the less expensive, equally effective option, since high-value care means achieving equivalent outcomes at lower cost when clinical effectiveness and safety are comparable

181. A child hospitalized with a mild upper respiratory illness and no signs of severe disease has a respiratory viral panel ordered reflexively, though the hospitalist acknowledges the result is unlikely to change antibiotic use, isolation precautions already in place, or discharge planning. What is the most evidence-based critique of this testing decision?

- A.** Testing should generally be reserved for situations where the result is likely to meaningfully change management, isolation, or disposition; ordering a test that will not affect any of these represents low-value care
- B.** Respiratory viral panel testing should never be performed under any circumstances in hospitalized pediatric patients
- C.** The test should be ordered regardless of expected impact on management, since identifying the specific viral pathogen is inherently valuable independent of any clinical use
- D.** The decision to order this test is appropriate primarily because it will support future research efforts, regardless of its clinical utility for this patient
- E.** There is no meaningful difference between ordering tests that change management and tests that do not, as long as the test itself is accurate

182. A hospitalist reads a newly published study reporting a benefit from a novel inpatient intervention and is considering changing unit practice based on the results. Before adopting the change, what is the most appropriate first step in critically appraising the study?

- A.** Adopt the new practice immediately based on the study's conclusion, without reviewing its methodology, since it has been published
- B.** Disregard the study entirely without reading it, since single studies are never worth considering under any circumstances
- C.** Base the decision to change practice solely on the reputation of the journal in which the study was published, without evaluating the study itself
- D.** Evaluate the study's methodology, including its design, sample size, and potential sources of bias or confounding, to assess whether its internal validity supports the reported conclusion

E. Change practice based only on the study's abstract, without reviewing the full methodology or results in detail

183. A hospitalist notices that several patients on her unit have had delayed discharges specifically because their families lack reliable transportation to obtain a required outpatient medication, and this pattern has recurred over several months. What is the most appropriate advocacy-oriented response?

- A. Address each occurrence only as an individual, one-time problem without considering whether a systemic solution could prevent recurrence
- B. Raise the pattern with hospital leadership or relevant hospital committees to explore systemic solutions, such as partnering with a pharmacy for bedside medication delivery before discharge
- C. Conclude that transportation barriers are outside the scope of any physician responsibility and take no further action
- D. Delay every future discharge indefinitely until the family independently resolves their own transportation barrier
- E. Report the recurring pattern only to the individual families involved, without raising it with the hospital system

184. A pediatric hospitalist is asked to lead a new interdisciplinary initiative to reduce unnecessary catheter-associated urinary tract infections, involving nursing, infection prevention, and physician stakeholders. What leadership approach is most likely to result in successful, sustained implementation?

- A. Design the entire initiative unilaterally as the physician leader and inform other disciplines of the finalized plan only after implementation has already begun
- B. Engage stakeholders from each discipline early in designing the initiative, incorporating their frontline perspective, to build shared ownership and buy-in for the change
- C. Exclude nursing input from the design process, since urinary catheter insertion and maintenance decisions are considered solely a physician responsibility
- D. Implement the initiative without any involvement from infection prevention specialists, since catheter-associated infections are not considered part of their role
- E. Focus exclusively on physician-facing education, without addressing nursing workflows or infection prevention practices related to catheter care

185. A hospital notices that patients from a particular medically underserved area of its catchment region have a higher rate of hospital readmission for asthma exacerbation than patients from other areas. As part of a systems-level advocacy response, what is the most appropriate initial step?

- A.** Assume the disparity in readmission rates is solely attributable to individual family choices, with no role for systemic or environmental contributors
- B.** Take no further action, since readmission rate differences between geographic areas are considered an unavoidable and unmodifiable outcome
- C.** Investigate potential underlying contributors, such as barriers to outpatient follow-up, medication access, or environmental exposures, in partnership with relevant stakeholders, before designing a targeted intervention
- D.** Address the disparity only by increasing the length of the initial hospital stay for all asthma admissions from the affected area, without addressing outpatient contributors
- E.** Refer the issue exclusively to billing and finance staff, since readmission rates are considered solely a financial metric with no relevance to systems-level advocacy

186. A pediatric hospitalist wants to help improve outpatient asthma control for children discharged from her hospital who lack reliable access to a controller medication after discharge. What is the most appropriate advocacy-oriented action at the community level?

- A.** Partner with community organizations, such as local pharmacies, patient assistance programs, or community health workers, to help bridge gaps in medication access after discharge
- B.** Conclude that medication access after discharge is entirely outside the hospital's sphere of influence and cannot be meaningfully addressed
- C.** Address the issue only by providing verbal medication instructions at discharge, without connecting the family to any resource that could improve access
- D.** Delay discharge indefinitely for all patients with asthma until medication access barriers are personally resolved by the hospitalist alone
- E.** Refer the issue solely to the family without offering any hospital or community-based resource to help address the barrier

187. A hospitalized 16-year-old requests that certain sensitive information discussed during a confidential portion of the visit not be shared with a parent, consistent with applicable state minor

consent and confidentiality laws for the specific services involved. What is the most appropriate general approach?

- A.** Disclose all information discussed with the adolescent to the parent regardless of applicable confidentiality protections, since parents are always entitled to full information about a hospitalized minor
- B.** Honor confidentiality for the specific categories of care protected under applicable state law and institutional policy, while continuing to encourage family involvement in overall care when appropriate
- C.** Refuse to discuss any sensitive topic with an adolescent patient under any circumstances, regardless of applicable minor consent and confidentiality laws
- D.** Base the confidentiality decision solely on personal preference, without regard to applicable state law or institutional policy
- E.** Assume that no confidentiality protections exist for any hospitalized minor under any circumstances

188. A 10-year-old is scheduled for a bedside procedure, and the parent has provided informed consent. The child expresses reluctance and asks questions about what will happen. What is the most appropriate additional step before proceeding?

- A.** Proceed with the procedure based on parental consent alone, without any additional discussion with the child, since parental consent is considered sufficient regardless of the child's expressed reluctance
- B.** Cancel the procedure entirely and permanently based solely on the child's initial reluctance, without further age-appropriate discussion or attempt to address concerns
- C.** Sedate the child prior to any further discussion specifically in order to avoid needing to address the child's expressed concerns
- D.** Obtain developmentally appropriate assent from the child in addition to parental consent, addressing the child's questions and concerns in age-appropriate language
- E.** Ask the parent to leave the room and make the final decision to proceed based solely on the child's preference, overriding the parent's consent

189. A hospitalized child has a serious, life-limiting underlying condition, and the medical team believes further escalation of intensive interventions is unlikely to meaningfully change the overall prognosis. What is the most appropriate approach to discussing this with the family?

- A.** Withhold prognostic information from the family entirely, since discussing a poor prognosis is assumed to always cause more harm than benefit
- B.** Initiate a goals-of-care conversation that explores the family's values and priorities, provides honest information about prognosis, and collaboratively discusses the range of care options, including palliative approaches
- C.** Unilaterally decide to withdraw all interventions without any discussion with the family, based solely on the medical team's assessment
- D.** Continue escalating every possible intensive intervention indefinitely without ever discussing goals of care with the family, regardless of the clinical picture
- E.** Defer the entire conversation exclusively to a subspecialist team member, with no involvement from the primary hospitalist team in goals-of-care discussions

190. A hospitalist notices findings during an admission that raise reasonable suspicion for child physical abuse. What is the hospitalist's legal and ethical obligation regarding this finding?

- A.** The hospitalist should report the finding only if fully certain that abuse occurred, since reasonable suspicion alone is not sufficient to trigger any reporting obligation
- B.** The decision of whether to report suspected abuse should be left entirely to the family's preference regarding whether they wish to involve child protective services
- C.** The hospitalist should address the finding only through informal counseling of the family, without formal reporting to any external agency, regardless of the level of suspicion
- D.** The hospitalist is legally mandated to report the reasonable suspicion of abuse to the appropriate child protective services or law enforcement agency, as required of healthcare providers under mandated reporter laws
- E.** Mandated reporting obligations for suspected child abuse apply only to social workers and not to physicians

191. While rounding, an attending hospitalist uses a structured approach with a resident: first asking the resident to commit to a diagnosis and plan, then asking about the supporting reasoning, reinforcing what

was done correctly, correcting specific errors, and teaching a generalizable clinical rule from the case. What teaching framework does this represent?

- A.** A purely didactic lecture format, in which the resident is expected only to passively receive information without being asked to commit to a plan
- B.** A pure simulation-based training exercise conducted away from the bedside
- C.** A formal written examination administered to assess resident knowledge
- D.** The one-minute preceptor model, a structured microskills approach to efficient, effective bedside teaching
- E.** An entirely unstructured conversation with no defined teaching steps

192. An attending hospitalist wants to give a resident feedback about a specific communication gap observed during a family meeting earlier that day. What approach to feedback is most likely to be effective?

- A.** Wait until the end-of-rotation evaluation, several weeks later, to first mention the specific communication gap observed
- B.** Deliver specific, timely, behavior-focused feedback shortly after the observed event, describing the specific gap and a concrete suggestion for improvement
- C.** Provide only vague, general praise without any specific behavioral detail about what could be improved
- D.** Deliver the feedback publicly in front of the entire care team and the patient's family, rather than in a private setting
- E.** Focus feedback entirely on the resident's perceived personal characteristics rather than on specific, observable behavior

193. A resident on the hospitalist service identifies a specific gap in her own knowledge about the management of a particular condition after seeing an unfamiliar case, and independently seeks out relevant literature and guidelines to address that gap before the next similar patient encounter. This behavior is best described by which principle of adult learning theory?

- A.** Passive knowledge acquisition, in which the learner is entirely dependent on a teacher to identify and address all learning needs

- B.** Rote memorization, in which information is learned without any connection to a practical clinical context
- C.** Simulation-based learning, which specifically requires a structured simulated clinical environment rather than independent study
- D.** Self-directed learning, in which the learner identifies her own learning needs and takes initiative to address them, often motivated by a specific, practical clinical problem
- E.** Assessment-driven learning, in which the primary motivation is exclusively to prepare for a scheduled examination

194. A residency program transitions from evaluating trainees using only global, subjective ratings to using defined competency milestones and entrustable professional activities (EPAs) to assess a resident's progression toward independent practice. What is the primary advantage of this competency-based assessment approach?

- A.** Milestones and EPAs are intended primarily to reduce the total amount of time required for residency training, independent of any assessment purpose
- B.** It provides more specific, criterion-based descriptions of expected skills and behaviors at defined developmental stages, allowing for more objective
- C.** Milestones and EPAs eliminate the need for any direct observation of trainees by supervising faculty
- D.** Milestones and EPAs are used exclusively to determine a resident's eligibility for board certification, with no role in day-to-day feedback and educational planning
- E.** Milestones and EPAs are intended to replace supervising faculty's clinical judgment entirely with automated assessment scores

195. A group of investigators wants to determine whether a new inpatient intervention causally reduces length of stay, and they randomly assign eligible patients to receive either the new intervention or standard care. What is the primary methodologic advantage of this randomized design over an observational cohort study for establishing causality?

- A.** Randomization helps balance both known and unknown confounding variables between groups, strengthening the ability to attribute observed differences in outcome to the intervention itself
- B.** Randomized trials are advantageous primarily because they require a smaller total sample size than any observational study addressing the same question

- C. Randomized trials eliminate the need for any statistical analysis of the resulting data
- D. Randomized trials are advantageous primarily because they can be completed more quickly than any observational cohort study
- E. Randomization primarily serves to make the study easier to conduct administratively, with no specific effect on internal validity

196. A hospitalist is evaluating the overall strength of evidence for a proposed clinical practice change and finds a well-conducted systematic review and meta-analysis of multiple randomized controlled trials addressing the question. Compared with a single well-designed randomized controlled trial on the same question, where does this type of evidence generally fall in the traditional hierarchy of evidence?

- A. A systematic review and meta-analysis is generally considered a lower level of evidence than an individual case report on the same topic
- B. A systematic review and meta-analysis is considered equivalent in evidence strength to expert opinion alone, regardless of the quality or number of included trials
- C. A well-conducted systematic review and meta-analysis of multiple randomized controlled trials is generally considered to represent a higher level of evidence than a single randomized controlled trial
- D. The evidence hierarchy does not distinguish between systematic reviews and any other individual study design
- E. A systematic review and meta-analysis is generally considered a lower level of evidence than a single small observational cohort study

197. A hospitalist is planning a project to reduce unnecessary continuous pulse oximetry use on the bronchiolitis pathway and is deciding whether to structure it as a formal human subjects research study requiring institutional review board (IRB) approval or as an internal quality improvement (QI) initiative. Which factor most strongly favors classifying the project as QI rather than human subjects research?

- A. The project is intended to improve local processes and outcomes using an already-established, evidence-based practice, with no intent to generate new generalizable knowledge
- B. The project should always be classified as QI simply because it is being conducted by clinical staff rather than by a professional research team
- C. The project should always be classified as human subjects research simply because it involves collecting any patient-related data

D. The classification of a project as QI versus research is based solely on whether the project involves any hospitalized patients

E. IRB review is never required for any project labeled internally as a quality improvement initiative, regardless of its actual design or intent

198. A group of investigators plans a research study that will involve enrolling hospitalized pediatric patients and collecting identifiable data as part of a novel intervention protocol. Before beginning enrollment, what is the required regulatory and ethical step?

A. IRB review is not required for studies involving pediatric patients as long as the intervention is believed by the investigators to be safe

B. Parental permission and, when developmentally appropriate, child assent are not required for pediatric research participation as long as IRB approval has been obtained

C. The study protocol must undergo institutional review board (IRB) review and approval, including specific consideration of additional protections required for pediatric research subjects, before enrollment begins

D. IRB review is required only if the study involves an experimental medication, and is not required for any other type of novel intervention protocol

E. IRB review can be completed after enrollment has already begun, as long as it is finalized before the study results are published

199. A study comparing two treatments reports a p-value of 0.03 for the primary outcome, with a pre-specified significance threshold of 0.05. How should this result be most accurately interpreted?

A. The p-value of 0.03 indicates there is a 97% probability that the observed treatment difference reflects a true, clinically meaningful effect

B. A statistically significant p-value of 0.03 guarantees that the observed difference is also clinically meaningful and important for patient care

C. The p-value indicates a 3% probability that the null hypothesis is true, given the study's observed data

D. Because the p-value fell below the significance threshold, no further consideration of the study's methodology, sample size, or confidence intervals is needed to interpret the finding

E. Assuming the null hypothesis of no true difference were true, there is a 3% probability of observing a difference this large by chance alone, meeting the pre-specified significance threshold

200. A pediatric hospitalist is designing a scholarly quality improvement project to reduce unnecessary continuous pulse oximetry use in stable bronchiolitis patients and wants to write a clear aim statement to guide the project. Which aim statement best reflects a well-constructed, SMART (specific, measurable, achievable, relevant, time-bound) quality improvement aim?

- A.** "Reduce the average duration of continuous pulse oximetry use in stable bronchiolitis patients not requiring supplemental oxygen by 30% within 6 months on the pediatric hospital medicine unit"
- B.** "Improve pulse oximetry practices on the unit," without specifying a target population, a measurable outcome, or a defined timeframe
- C.** "Eliminate all use of pulse oximetry monitoring for every hospitalized patient regardless of clinical status, with no defined timeframe for achieving this goal"
- D.** "Make staff more aware of high-value care principles in general," without a specific, measurable target related to the clinical process being addressed
- E.** "Achieve a theoretically ideal, zero-error monitoring process with no further need for ongoing measurement or reassessment after initial implementation"

Answers

1. D. This is established status epilepticus (seizure activity persisting beyond benzodiazepine therapy), which by protocol moves to a second-line agent such as fosphenytoin or levetiracetam. A third benzodiazepine dose raises the risk of respiratory depression without added efficacy after two failed doses. Hypothermia protocols are used for post-arrest neuroprotection, not for terminating an ongoing seizure. MRI is valuable for later workup but must never delay abortive treatment in active status epilepticus. Dexamethasone has no role in terminating a seizure; it is used for conditions like croup or vasogenic edema, not seizure activity itself.

2. E. New focal neurologic findings during treated bacterial meningitis are a red flag for an intracranial complication (subdural empyema, venous sinus thrombosis, abscess, or infarct), and imaging should precede any further intervention. Repeating the LP first risks herniation if there is a mass effect or elevated intracranial pressure and does not address the acute focal finding. Empirically raising the vancomycin dose assumes treatment failure without evidence and does not explain a new focal deficit. Attributing new focal findings to a postictal state without confirming a seizure occurred is a dangerous assumption in a patient with new neurologic deficits. Empiric acyclovir is reasonable when herpes encephalitis is a genuine differential concern, but it does not address the possibility of a structural intracranial complication, which imaging is needed to rule in or out first.

3. C. This is diabetic ketoacidosis: insulin deficiency drives lipolysis and ketone body formation (the fruity odor), while hyperglycemia causes an osmotic diuresis that produces the dehydration and tachycardia. A CNS infection can cause altered mental status but does not explain the ketosis or the specific metabolic pattern described. SIADH causes dilutional hyponatremia, not hyperglycemia, and does not fit this picture. Adrenal insufficiency classically causes hypoglycemia and hyperkalemia from cortisol/aldosterone deficiency, the opposite of what's described. Salicylate toxicity can cause a mixed respiratory alkalosis/metabolic acidosis but does not produce ketotic fruity breath from hyperglycemia in this classic pattern.

4. A. This presentation (ascending weakness, areflexia, facial involvement, antecedent GI illness) is classic Guillain-Barre syndrome, an inflammatory polyradiculoneuropathy, and its hallmark CSF finding is albuminocytologic dissociation: elevated protein without a corresponding pleocytosis. Neutrophilic pleocytosis would instead suggest bacterial infection, not GBS. A discrete enhancing intramedullary mass would point toward a spinal cord tumor or transverse myelitis, not a peripheral neuropathic process. A markedly elevated CK points toward a primary myopathic process (such as rhabdomyolysis or inflammatory myositis), not the demyelinating peripheral nerve process seen in GBS. Pure muscle pathology on EMG without nerve involvement would argue against GBS, which is a nerve-root and peripheral nerve disorder rather than a primary muscle disease.

5. C. A ring-enhancing lesion with edema and a new focal deficit in a child with sinusitis is a brain abscess from contiguous spread, and management requires broad empiric antibiotics targeting typical sinusitis-associated organisms plus neurosurgical evaluation, since many abscesses need drainage for both source control and diagnostic culture. Steroids alone do not treat the underlying infection and can be considered later for edema, but never as monotherapy for an abscess. Oral outpatient management is inadequate for an intracranial infection with mass effect and a new neurologic deficit; this requires inpatient IV therapy. Anticoagulation would be appropriate for venous sinus thrombosis, a different diagnosis, and giving anticoagulation to a ring-enhancing mass lesion risks hemorrhage. Withholding antibiotics while awaiting a biopsy delays treatment of a potentially life-threatening infection and is not standard practice.

6. A. Temporal lobe involvement with fever, seizures, and aphasia is the classic presentation of HSV encephalitis, and outcomes are strongly tied to time to treatment, so empiric IV acyclovir must begin immediately, before PCR confirmation returns, given the low harm of a brief antiviral course versus the high risk of delayed treatment. Waiting for PCR results before starting treatment risks irreversible neurologic injury during the delay. Antibacterial therapy alone does not address the leading diagnosis of viral encephalitis. An EEG can support the diagnosis and characterize seizure activity but should never be used to justify delaying antiviral treatment. Oral acyclovir has inadequate CNS penetration and this diagnosis requires inpatient IV dosing, not an outpatient oral taper.

7. D. Progressive worsening, morning predominance with vomiting, and new cerebellar signs (ataxia) together form a classic red-flag pattern for raised intracranial pressure from a mass lesion, and this combination warrants urgent imaging. A family history of migraine is a common and generally

reassuring feature that lowers, not raises, concern, since primary headache disorders are more likely in that context. Response to a simple analgesic is typical of benign primary headaches and does not itself indicate a secondary cause. A normal exam is reassuring but does not override the concerning symptom pattern already present. A clear situational trigger like school stress is more consistent with a tension-type headache than with a structural intracranial process.

8. C. Sudden-onset focal neurologic deficits in a child with sickle cell disease should be treated as acute ischemic stroke until proven otherwise, since sickle cell cerebral vasculopathy markedly raises stroke risk, and this requires emergent evaluation and exchange transfusion. Todd paralysis follows a witnessed seizure, which is not described here, and should not be assumed as the explanation in a high-risk sickle cell patient with sudden deficits. Conversion disorder is a diagnosis of exclusion and would be inappropriate to assume before stroke has been ruled out in this high-risk population. Hypoglycemia can cause altered mental status but does not typically produce isolated unilateral facial droop, arm weakness, and dysarthria together. Bell palsy affects the face in isolation and would not explain the accompanying arm weakness and dysarthria.

9. D. The combination of drooling, muffled ('hot potato') voice, tripod positioning, and high fever with stridor is classic for epiglottitis, a supraglottic emergency requiring a controlled airway approach. Viral croup typically has a barking cough and stridor but not drooling or a muffled voice, and children are usually more comfortable lying down. Bacterial tracheitis often follows a viral prodrome with a toxic appearance and thick secretions but drooling and tripod positioning are less typical than in epiglottitis. Foreign body aspiration usually presents with a sudden choking episode and unilateral findings rather than this febrile, progressive picture. Retropharyngeal abscess can cause drooling and neck stiffness, but the tripod positioning with muffled voice and high fever described here is more classically epiglottitis.

10. B. Prevertebral soft tissue widening with fever, torticollis, and drooling is concerning for retropharyngeal abscess, and the appropriate next step is contrasted CT to characterize the collection and involve a surgical service, since many abscesses require drainage plus IV antibiotics. Oral outpatient management is inadequate for a deep neck space infection with these features, which carries risk of airway compromise and mediastinal extension. Blind needle aspiration without imaging guidance risks vascular injury given the proximity of the carotid sheath and is not standard practice. Immobilization alone without antibiotics or further evaluation does not treat the underlying infection. This is a bacterial process, so antiviral therapy has no role.

11. A. Trismus, uvular deviation, and a muffled voice with unilateral throat pain are the classic features of peritonsillar abscess, which usually requires needle aspiration or incision and drainage in addition to antibiotics. Uncomplicated strep pharyngitis does not cause trismus or uvular deviation. Mononucleosis causes bilateral tonsillar enlargement with exudate but not the unilateral bulging and uvular deviation seen with an abscess. Ludwig angina is a floor-of-mouth space infection causing tongue elevation and airway compromise, a different anatomic process than a peritonsillar collection. Epiglottitis presents with drooling and stridor but not unilateral peritonsillar bulging with uvular deviation.

12. D. Pain with eye movement, proptosis, and vision changes indicate orbital (postseptal) involvement rather than simple preseptal cellulitis, and this requires emergent imaging to look for orbital abscess or other complications needing surgical intervention. Treating this as preseptal cellulitis with oral antibiotics alone under-treats a sight- and life-threatening postseptal process. Topical drops address only the ocular surface and do not treat deep orbital or sinus infection. Discharging home risks vision loss or intracranial spread from an untreated orbital infection. Antihistamines would be appropriate for an allergic reaction, which does not explain painful eye movements, proptosis, or vision changes.

13. A. Postauricular swelling with anterior/inferior displacement of the pinna following otitis media is the classic presentation of mastoiditis, a suppurative complication requiring IV antibiotics and often ENT evaluation for possible drainage or mastoidectomy. Simple recurrent otitis media does not cause postauricular swelling or pinna displacement. Preauricular cellulitis is anatomically in front of the ear, not behind it, and would not be linked mechanistically to the same process. Parotitis involves swelling anterior to and below the ear over the parotid gland, a different anatomic location. Cervical lymphadenitis presents as neck swelling rather than postauricular swelling with pinna displacement.

14. A. A tender, fluctuant, erythematous neck mass following a recent URI is most consistent with bacterial (often staphylococcal or streptococcal) suppurative lymphadenitis that has progressed to abscess, which often needs drainage plus antibiotics. A thyroglossal duct cyst is typically midline and moves with tongue protrusion, a different anatomic and physical exam pattern. An uninfected branchial cleft cyst would not be acutely tender, fluctuant, and erythematous. Kawasaki disease causes cervical lymphadenopathy but as part of a broader syndrome of prolonged fever, mucocutaneous changes, and conjunctivitis, not an isolated fluctuant abscess. Cat-scratch disease typically causes a more indolent, less acutely fluctuant lymphadenopathy over a longer time course, often with a preceding scratch history.

15. E. Progression from sinusitis to proptosis, severe headache, and altered mental status raises concern for intracranial spread such as cavernous sinus thrombosis or epidural/subdural empyema, which is a neurosurgical and infectious emergency needing urgent imaging and broad-spectrum therapy. A simple viral URI with allergic swelling would not cause proptosis or altered mental status. Migraine can cause headache but does not typically cause proptosis or mental status decline. Acute angle-closure glaucoma causes eye pain and vision changes but is not linked to sinusitis or fever in this way. Uncomplicated preseptal cellulitis does not involve proptosis or mental status changes, both of which point to deeper, postseptal/intracranial involvement.

16. A. Bilateral, tender parotid swelling with fever and trismus in an unvaccinated child is classic for viral (mumps) parotitis, which is typically managed supportively. Bacterial suppurative parotitis is usually unilateral, more acutely purulent-appearing, and associated with dehydration or a debilitated state rather than this bilateral viral pattern. Sialolithiasis typically causes intermittent swelling related to eating (as saliva flow is obstructed), not this acute bilateral febrile presentation. Cervical lymphadenitis presents as discrete neck node swelling rather than diffuse parotid gland swelling anterior to the ear.

Cat-scratch disease classically causes regional lymphadenopathy near an inoculation site, not bilateral parotid gland swelling.

17. A. Hypoxemia in bronchiolitis after suctioning is managed with supplemental oxygen titrated to a saturation target; this is a viral lower airway process and supportive oxygen therapy is the mainstay. Albuterol has not been shown to reliably benefit most infants with bronchiolitis and is not first-line. Antibiotics are not indicated for uncomplicated viral bronchiolitis without evidence of bacterial infection. Racemic epinephrine is used for croup (upper airway edema), not bronchiolitis, and would not be expected to help this lower airway process. Systemic corticosteroids have not shown benefit in bronchiolitis and are not part of standard therapy.

18. C. A silent chest with rising CO₂ signals impending respiratory failure from severe airflow obstruction, and IV magnesium sulfate is an appropriate next-line therapy while escalating support (terbutaline, ICU care, possible non-invasive or invasive ventilation) is arranged. Stopping bronchodilators in worsening status asthmaticus would remove needed therapy rather than escalate it. A chest CT is not indicated emergently in an acute severe asthma exacerbation and would delay life-saving treatment. Switching from IV to oral steroids in a patient this severe is a de-escalation, not appropriate when the child is worsening. Asthma exacerbations are not primarily bacterial, so inhaled antibiotics have no established role.

19. D. For a fully immunized, non-toxic-appearing child with uncomplicated CAP, ampicillin (or penicillin) targeting the most likely pathogen, *Streptococcus pneumoniae*, is standard first-line inpatient therapy. Vancomycin plus a cephalosporin is reserved for severe, complicated, or MRSA-concerning presentations, which is broader than needed here. Azithromycin monotherapy targets atypical pathogens and is not preferred first-line coverage for typical bacterial CAP requiring hospitalization. A carbapenem is unnecessarily broad-spectrum for straightforward uncomplicated CAP. Clindamycin monotherapy is not standard first-line pneumococcal coverage and is more often reserved for suspected staphylococcal or anaerobic infection or penicillin allergy scenarios.

20. C. Rising CO₂ with declining mental status despite high-flow support indicates impending respiratory failure, and the appropriate step is definitive airway management with intubation rather than further trials of non-invasive support. Simply increasing flow and waiting risks further deterioration without addressing the failing respiratory status. A simple face mask provides less respiratory support than high-flow cannula and would be a step backward. Racemic epinephrine treats upper airway edema (as in croup), not the lower airway/parenchymal process causing this deterioration. Switching antibiotic routes does not address the acute physiologic threat of impending respiratory failure.

21. B. In a child with chronic lung disease of prematurity (BPD), an acute increase in oxygen need during a viral illness should be framed as an acute-on-chronic exacerbation, with management supporting oxygenation relative to her known baseline while treating the trigger. An echocardiogram may eventually be reasonable if cardiac disease is suspected, but it should not preempt basic respiratory support and should not be assumed as the primary explanation without other supporting findings.

Treating her identically to a previously healthy infant ignores that her baseline is different and that her chronic lung disease changes her risk and management. Weaning to baseline while she is hypoxic relative to that baseline would be unsafe. Assuming non-adherence without evaluating the acute illness risks missing the actual precipitant.

22. C. Sudden choking with unilateral wheeze and decreased breath sounds after eating a high-risk food is classic for foreign body aspiration, and definitive management is bronchoscopic retrieval, which is both diagnostic and therapeutic. Bronchodilators do not address a mechanical airway obstruction from a foreign body. A CT can support diagnosis in ambiguous cases but should not delay bronchoscopy when the history and exam are this classic, since observation risks further airway compromise or migration of the object. Observing for spontaneous resolution risks worsening obstruction, air trapping, or post-obstructive infection. Antibiotics do not address the underlying foreign body and are not the primary management step.

23. C. A child with an initial croup-like picture who develops high fever, toxicity, and thick secretions unresponsive to racemic epinephrine has likely progressed to bacterial tracheitis, a bacterial superinfection of the trachea that often requires airway management and IV antibiotics. Uncomplicated viral croup typically improves with racemic epinephrine and steroids and does not produce a toxic appearance with purulent secretions. Spasmodic croup is typically recurrent, afebrile, and resolves quickly, unlike this toxic, progressive presentation. Foreign body aspiration usually has an acute choking history rather than a preceding croup-like viral course. Peritonsillar abscess causes unilateral throat findings with trismus, not stridor with thick tracheal secretions.

24. E. Persistent fever with new pleuritic pain and decreased breath sounds after several days of appropriate treatment raises concern for a complication like parapneumonic effusion or empyema, and imaging is needed to characterize the fluid collection and guide whether drainage is needed. Switching antibiotic classes without first identifying a complication is premature and does not address the possible need for source control via drainage. Persistent fever with new focal findings on day 4 is not an expected benign course and should not be discharged without evaluation. Antiviral therapy does not address a bacterial pneumonia complication. Simply increasing the antibiotic dose does not address a possible undrained fluid collection, which antibiotics alone may not adequately treat.

25. C. A child who has been stable on an every-4-hour albuterol interval, with normal work of breathing and a peak flow near personal best, meets typical readiness-for-discharge criteria, and the appropriate step is to arrange an outpatient controller regimen and follow-up. Continuing inpatient observation for days beyond stability does not reflect appropriate use of resources or evidence-based discharge criteria. Adding another systemic steroid course is unnecessary once the patient has clinically stabilized on the current regimen. Escalating therapy in an improving, stable patient would be inappropriate. Discharging without any controller therapy or follow-up plan increases the risk of early relapse or readmission.

26. C. Palivizumab eligibility criteria are built around risk factors for severe RSV disease, principally prematurity and chronic lung disease (or certain congenital heart disease), so gestational age combined

with ongoing chronic lung disease requiring support is the directly relevant factor for this risk-based decision. Family preference regarding hospital stay length has no bearing on RSV prophylaxis eligibility criteria. Blood type and Rh status are unrelated to RSV risk stratification. A single uncomplicated ear infection does not factor into RSV prophylaxis risk criteria. Maternal vaccination status during pregnancy is not part of the infant palivizumab eligibility criteria (unlike, for example, newer maternal RSV vaccination programs aimed at a different mechanism of protection).

27. A. A differential blood pressure (arms higher than legs) with weak femoral pulses and shock in the first weeks of life, as the ductus arteriosus closes, is classic for ductal-dependent coarctation of the aorta, which requires prostaglandin E1 to reopen the ductus and restore systemic perfusion. Sepsis can present with shock, but it would not specifically explain the differential blood pressure and pulse pattern between the arms and legs. SVT causes a very rapid, usually regular heart rate; while it can lead to shock if prolonged, it does not explain the specific limb blood pressure gradient described. Salt-wasting CAH presents with electrolyte derangements (hyponatremia, hyperkalemia) and shock, but not this specific limb blood pressure gradient pointing to an aortic obstruction. Hypertrophic cardiomyopathy could cause outflow obstruction, but the differential arm-leg blood pressure and timing around ductal closure specifically points to coarctation.

28. A. Poor feeding with diaphoresis (a sign of increased work of feeding), tachypnea, hepatomegaly, and a gallop rhythm together form the classic infant presentation of congestive heart failure, prompting evaluation for an underlying cardiac lesion. GERD alone would not explain hepatomegaly or a gallop rhythm. Bronchiolitis can cause tachypnea but does not typically cause hepatomegaly or a cardiac gallop. Cow's milk protein intolerance typically causes GI symptoms (blood in stool, eczema, feeding intolerance) rather than hepatomegaly and a gallop rhythm. Simple overfeeding does not produce hepatomegaly or a gallop, both of which point toward a cardiac rather than a purely feeding-related process.

29. E. A stable infant in SVT (narrow-complex, regular, very rapid rate) should first have vagal maneuvers attempted, since they are noninvasive and can terminate the arrhythmia without medication; if unsuccessful, adenosine is the next step, followed by cardioversion if the patient becomes unstable. Proceeding straight to cardioversion is reserved for hemodynamically unstable patients, not a stable infant where less invasive options should be tried first. Amiodarone is not the first-line acute treatment in a stable infant with SVT. A fluid bolus alone does not address the arrhythmia mechanism. Starting oral beta-blocker therapy is a longer-term consideration, not the acute first step for terminating an active tachyarrhythmia.

30. A. Fever, a new regurgitant murmur, and peripheral stigmata (splinter hemorrhages) in a child with underlying structural heart disease is concerning for infective endocarditis, and the correct next step is obtaining blood cultures (ideally before antibiotics) plus echocardiography to look for vegetations, guiding targeted therapy. Oral amoxicillin alone, without first obtaining cultures, risks partially treating the infection and making organism identification harder, and does not constitute the definitive workup needed. A new murmur with systemic findings should not be attributed to normal VSD progression

without investigation, since endocarditis is a dangerous and treatable diagnosis that must be excluded. Empiric antifungal therapy is not first-line without culture data supporting a fungal etiology. Discharge without cardiac workup would miss a potentially life-threatening infection.

31. C. A classic situational trigger with typical prodrome (lightheadedness, nausea, visual changes) and rapid recovery is the reassuring pattern of vasovagal syncope, the most common and generally benign cause in adolescents. Syncope during exercise is a red flag for an underlying cardiac cause (such as hypertrophic cardiomyopathy or an arrhythmia) and warrants cardiac evaluation. A family history of sudden unexplained death raises concern for an inherited arrhythmia syndrome and is a red flag, not a reassuring feature. Syncope preceded by palpitations or chest pain suggests a cardiac arrhythmic cause rather than a vasovagal mechanism. A prolonged QT interval is itself a red flag for an arrhythmogenic cause of syncope, not a reassuring finding.

32. D. In a hypertensive emergency with end-organ symptoms (headache, vision changes), the goal is a controlled, gradual reduction using a titratable IV agent, since overly rapid normalization risks cerebral hypoperfusion and ischemic injury. Rapidly normalizing blood pressure within an hour risks watershed cerebral injury from the abrupt pressure drop. Withholding treatment in a true hypertensive emergency with symptoms is unsafe and delays needed care. A single large oral dose is not titratable and risks unpredictable, excessive blood pressure drops. IV fluids alone do not address the underlying hypertensive emergency and could worsen fluid overload in a patient with kidney disease.

33. D. An unresponsive child with no pulse and a chaotic wide-complex rhythm (ventricular fibrillation/pulseless VT) requires immediate high-quality CPR with defibrillation as soon as it is available, per pediatric advanced life support protocols. Synchronized cardioversion is used for an unstable but perfusing rhythm with a pulse, not for a pulseless arrest, where defibrillation (unsynchronized) is used instead. Adenosine is used for stable SVT with a pulse, not for pulseless arrest. Vagal maneuvers are similarly reserved for a stable patient with a pulse and are not appropriate in cardiac arrest. Obtaining a 12-lead ECG should never delay starting CPR in a pulseless patient.

34. B. Septic shock often has an early 'warm' phase with bounding pulses and wide pulse pressure from vasodilation, before progressing to the cold, poorly perfused phase; this distributive pattern helps distinguish it from a primary cardiac pump failure. Jugular venous distension, hepatomegaly, and a gallop are signs of volume overload and pump failure, pointing toward cardiogenic rather than septic shock. Pulmonary edema with cardiomegaly reflects a failing heart unable to handle preload, a cardiogenic pattern, not the distributive pattern of sepsis. A recent cardiac surgery history would raise suspicion for a cardiac etiology (or tamponade), not primarily septic shock. Muffled heart sounds with pulsus paradoxus suggest cardiac tamponade, an obstructive cardiogenic-type shock, not a septic distributive process.

35. A. Migration of pain from periumbilical to RLQ followed by diffuse tenderness, rigidity, and high fever indicates progression from localized appendicitis to perforation with generalized peritonitis, a surgical emergency. Simple early appendicitis would show localized RLQ tenderness rather than diffuse

rigidity and high fever. Mesenteric adenitis typically causes milder, less localized pain without this progression to peritoneal signs. Constipation can cause diffuse discomfort but not fever with rigidity and true peritoneal signs. Viral gastroenteritis typically causes diffuse crampy pain with vomiting/diarrhea, not localized migration followed by peritonitis.

36. E. The classic triad (intermittent colicky pain, lethargy between episodes, currant-jelly stool) with a target sign on ultrasound confirms intussusception, and first-line treatment is enema reduction (air or contrast) under image guidance, which is both diagnostic and therapeutic in most cases. Proceeding directly to surgery bypasses the less invasive, usually successful enema reduction, which is reserved as first-line unless there are signs of perforation or peritonitis. Conservative observation alone does not address the mechanical obstruction and risks bowel ischemia. Antibiotics do not treat the mechanical intussusception itself. An upper GI study evaluates for malrotation/volvulus, not intussusception, and is not the appropriate test here.

37. C. This is classic hypertrophic pyloric stenosis, and prior to surgical pyloromyotomy the priority is correcting the hypochloremic, hypokalemic metabolic alkalosis from repeated vomiting of gastric contents, since operating on a metabolically unstable infant increases anesthetic risk. Proceeding straight to surgery without correcting electrolytes first raises perioperative risk and is not standard practice. Acid suppression does not address the mechanical pyloric obstruction, which is a structural, not an acid-related, problem. Thickened feeds do not address a true mechanical outlet obstruction. Imaging can confirm the diagnosis but should not take priority over addressing a significant electrolyte derangement once the diagnosis is already strongly suspected clinically.

38. E. Bilious vomiting in a neonate is a surgical emergency until proven otherwise, most concerning for malrotation with midgut volvulus, which can rapidly progress to bowel ischemia; this requires emergent surgical involvement and prompt imaging. Bilious vomiting is never considered benign reflux and should never be reassured away without evaluation. Oral rehydration and 24-hour observation risks bowel necrosis if volvulus is present, since time to correction is critical. Antibiotics alone do not address a mechanical, potentially ischemic surgical emergency. A formula trial delays recognition of a time-sensitive surgical condition.

39. B. Bright red blood associated with a visible anal fissure in an otherwise well, hemodynamically stable child with no pain is most consistent with a simple anal fissure as the bleeding source, often related to constipation. Upper GI bleeding would more typically present as melena or coffee-ground emesis rather than isolated bright red blood with a visible local anal lesion. Meckel diverticulum classically causes painless bleeding but would not be associated with a visible anal fissure explaining the source; the visible local lesion here is the more directly explanatory finding. IBD typically presents with additional systemic and GI symptoms (diarrhea, weight loss, abdominal pain) rather than isolated bleeding from a visible fissure. Intussusception causes colicky pain and currant-jelly stool, a different clinical pattern than this painless bleeding with a visible fissure.

40. A. For mild dehydration with a child who is alert and tolerating oral intake, oral rehydration solution given in small frequent amounts is the preferred first-line approach, per standard gastroenteritis management guidelines. IV fluids are reserved for more significant dehydration or failure of oral rehydration, not as a default first step when oral intake is being tolerated. Strict bowel rest is not recommended; early return to age-appropriate feeding is encouraged in gastroenteritis. Full-strength juice has high osmotic load and can worsen diarrhea, so it is not recommended for rehydration. An NG tube for rehydration is reserved for cases where oral rehydration is attempted and fails, not as an initial step when oral intake is already tolerated.

41. B. Elevated transaminases with positive ANA and anti-smooth muscle antibody, and negative viral serologies, is the classic autoantibody pattern of autoimmune hepatitis, which often requires immunosuppressive therapy. Hepatitis A would show positive viral serology (anti-HAV IgM), not the described negative viral panel with autoantibodies. Wilson disease is a consideration in unexplained liver disease in this age group but is characterized by low ceruloplasmin and Kayser-Fleischer rings, not this autoantibody pattern. Alpha-1 antitrypsin deficiency is diagnosed by low AAT levels and phenotype, not autoantibodies. NAFLD is typically associated with obesity and insulin resistance and would not classically present with positive ANA/anti-smooth muscle antibodies driving the diagnosis.

42. A. Acute pancreatitis (confirmed here by the classic pain pattern and markedly elevated lipase) is managed primarily with IV fluid resuscitation and supportive care, with evidence supporting early enteral feeding as tolerated rather than prolonged fasting. Surgery is reserved for specific complications (such as infected necrosis), not as an initial approach to uncomplicated acute pancreatitis. Routine TPN as a default first step is not preferred over early enteral feeding when tolerated, per current evidence. Corticosteroids have no established first-line role in acute pancreatitis management. Antifungal therapy is not indicated without evidence of a fungal infectious complication.

43. C. Continuous mucosal inflammation confined to the colon, without terminal ileal involvement, is the classic distribution of ulcerative colitis, as opposed to Crohn disease's patchy skip lesions that can involve any part of the GI tract including the terminal ileum. Crohn disease characteristically shows discontinuous 'skip' lesions and frequently involves the terminal ileum, the opposite of what's described here. IBS is a functional disorder without the mucosal inflammation, bleeding, and weight loss described. Infectious colitis is typically self-limited and would not classically show this chronic, continuous inflammatory pattern with associated weight loss over time. Celiac disease primarily affects the small intestine (duodenum/jejunum) causing malabsorption, not a colonic inflammatory pattern like this.

44. C. Chronic hemolysis in sickle cell disease leads to increased bilirubin turnover and pigment gallstone formation; when a stone obstructs the common bile duct (choledocholithiasis), this causes the dilated duct and jaundice described, often requiring ERCP or surgical intervention. Viral hepatitis would show elevated transaminases and specific viral markers rather than gallstones with ductal dilation as the primary imaging finding. Primary sclerosing cholangitis is a distinct, less common process typically associated with inflammatory bowel disease, not directly explained by this patient's hemolytic disease.

Wilson disease causes hepatocellular injury and copper accumulation, not gallstone-related ductal obstruction. A functional gallbladder disorder without stones would not explain the visualized gallstones and ductal dilation on ultrasound.

45. E. The classic triad of microangiopathic hemolytic anemia, thrombocytopenia, and acute kidney injury following a diarrheal illness (often from Shiga toxin-producing *E. coli*, such as from undercooked beef) defines hemolytic uremic syndrome, managed supportively with attention to fluid and electrolyte status, generally avoiding antibiotics for the triggering infection. ITP causes isolated thrombocytopenia without the hemolytic anemia and renal injury seen here. HSP nephritis typically follows a palpable purpuric rash with joint and abdominal symptoms, a different clinical pattern than this post-diarrheal triad. DIC from sepsis would typically show coagulation abnormalities (prolonged PT/PTT, low fibrinogen) in the context of a septic picture, which is not described here. Post-streptococcal GN follows a strep infection (pharyngitis or skin) with hematuria and edema, not this specific post-diarrheal hemolytic and thrombocytopenic pattern.

46. E. An elevated BUN:creatinine ratio above 20:1 with a low fractional excretion of sodium (under 1%) reflects the kidneys appropriately conserving sodium and water in response to volume depletion, characteristic of prerenal AKI, which typically improves with fluid resuscitation. Intrinsic ATN typically shows a higher FENa (often above 2%) since tubular injury impairs sodium reabsorption, the opposite pattern from what's described. Postrenal obstruction would typically be suggested by hydronephrosis on imaging and a different clinical context (such as stone-related pain), not simply this lab pattern following gastroenteritis. Chronic kidney disease would typically show a more established baseline creatinine elevation over time rather than this acute presentation tied temporally to volume loss. Glomerulonephritis typically presents with hematuria, proteinuria, and hypertension rather than this classic prerenal lab pattern.

47. C. Tea-colored (cola-colored) urine, edema, and hypertension appearing roughly 1-2 weeks after a documented strep infection is the classic latency and presentation of post-streptococcal glomerulonephritis, typically managed supportively with attention to fluid and blood pressure control. IgA nephropathy classically presents with hematuria concurrent with or shortly after an upper respiratory infection (synpharyngitic), rather than the 1-2 week latency period seen with PSGN. Minimal change nephrotic syndrome presents primarily with heavy proteinuria and edema, typically without the gross hematuria and hypertension pattern described here, and is not classically linked temporally to a preceding strep infection this way. Acute interstitial nephritis is typically linked to a causative medication, which is not mentioned in this history. HUS follows a diarrheal illness with the hemolytic anemia/thrombocytopenia/AKI triad, not a preceding pharyngitis with this edema/hypertension/hematuria pattern.

48. B. A small distal ureteral stone (under about 5-6mm) without hydronephrosis or signs of infection is typically managed conservatively with pain control, hydration, and observation for spontaneous passage, since most stones this size pass without intervention. Immediate surgical extraction is reserved for larger stones, ongoing obstruction, infection, or intractable pain, not routinely for a small uncomplicated stone.

Dialysis is reserved for significant renal failure, not a single small ureteral stone without hydronephrosis. Corticosteroids have no established role in acute ureterolithiasis management. Fluid restriction would be counterproductive, since adequate hydration supports natural stone passage.

49. C. Heavy proteinuria, hypoalbuminemia, edema, and hyperlipidemia without significant hematuria in a young child is the classic nephrotic syndrome picture, most commonly from minimal change disease, which is typically steroid-responsive. Post-streptococcal GN classically presents with hematuria and hypertension (a nephritic pattern) rather than this predominantly nephrotic picture with heavy proteinuria and minimal hematuria. HSP nephritis usually occurs alongside the characteristic purpuric rash, arthritis, and abdominal pain, which are not described here. Protein-losing enteropathy would cause hypoalbuminemia through GI protein loss rather than urinary loss, and would not produce heavy proteinuria on urinalysis. Acute interstitial nephritis typically presents with acute kidney injury, often with eosinophiluria and a medication trigger, not this classic nephrotic syndrome pattern.

50. B. Lower abdominal pain with cervical motion tenderness and fever in a sexually active adolescent meets criteria for presumptive treatment of PID, and empiric broad-spectrum therapy should begin promptly given the risk of tubo-ovarian complications and infertility from delayed treatment, without waiting for definitive culture confirmation. Withholding antibiotics until cultures return risks progression of infection and long-term reproductive complications. Treating only for a UTI would miss the likely diagnosis of PID, which needs different, broader antimicrobial coverage. Analgesics alone do not treat the underlying infection. PID is a bacterial process, so antiviral therapy alone would not be appropriate.

51. C. Sudden severe unilateral pain with a tender adnexal mass raises concern for ovarian torsion, a time-sensitive surgical emergency, and Doppler ultrasound is the appropriate next step to evaluate ovarian blood flow and guide urgent surgical consultation. Conservative management with delayed reassessment risks ovarian necrosis if torsion is present, since ovarian viability decreases with time. Empiric antibiotics without imaging would miss a surgical emergency if torsion, rather than PID, is the cause. A plain x-ray has poor sensitivity for adnexal pathology and is not the appropriate primary imaging modality. Discharging with an assumed diagnosis without imaging risks missing a true surgical emergency.

52. C. Recurrent febrile UTIs in a young child warrant imaging evaluation, starting with a renal and bladder ultrasound to look for structural abnormalities such as hydronephrosis, with a VCUG considered depending on ultrasound findings or the clinical pattern, to evaluate for vesicoureteral reflux or other anatomic risk factors. No imaging at all would miss a treatable underlying anatomic cause after a second febrile UTI, which is a recognized indication for further workup. A brain MRI is not relevant to a urinary tract infection source. Renal biopsy is not indicated for recurrent UTIs without evidence of an underlying renal parenchymal disease process. A chest x-ray does not evaluate the urinary tract and is not relevant to this presentation.

53. B. Fever, inability to bear weight, and markedly elevated inflammatory markers (ESR, CRP, WBC) together meet high-risk Kocher-type criteria strongly favoring septic arthritis over transient synovitis, and this requires urgent joint aspiration and likely surgical drainage plus antibiotics. Transient synovitis is typically a lower-grade, self-limited process with normal or only mildly elevated inflammatory markers and no high fever, unlike this presentation. Legg-Calve-Perthes disease is a chronic avascular necrosis process presenting with a more insidious course, not this acute febrile picture with markedly elevated inflammatory markers. SCFE typically presents in older, often overweight adolescents with a more gradual onset of hip or knee pain, not this acute febrile inflammatory presentation. A JIA flare would not typically present this acutely with such high fever and markedly elevated acute-phase reactants pointing to infection.

54. B. An absent pulse with a cool, poorly perfused hand after a supracondylar fracture indicates vascular compromise, a limb-threatening emergency requiring emergent orthopedic (and possibly vascular surgery) evaluation for urgent reduction to restore perfusion. Waiting 24 hours to reassess risks irreversible limb ischemia. Discharging home with a vascularly compromised limb is unsafe and could result in permanent injury or limb loss. Anticoagulation does not address a mechanical vascular compression from a displaced fracture and could complicate any needed surgical intervention. Prolonged observation without involving a surgical team delays time-critical intervention needed to restore perfusion.

55. A. This clinical picture meets classic criteria for Kawasaki disease (prolonged fever plus conjunctival injection, mucosal changes, rash, and extremity changes), and prompt treatment with IVIG and high-dose aspirin, along with baseline echocardiography to assess coronary arteries, is essential to reduce the risk of coronary artery aneurysms. Treating for scarlet fever alone would miss this diagnosis and delay treatment that reduces coronary artery complications. Reassuring the family that this is a benign self-limited illness ignores the significant risk of coronary artery damage if Kawasaki disease is untreated. Corticosteroids alone, without IVIG, is not standard first-line therapy for typical Kawasaki disease. Observing without treatment increases the risk of coronary artery aneurysm formation, which is time-sensitive to prevent.

56. E. Persistent or recrudescent fever after initial IVIG treatment defines IVIG-resistant Kawasaki disease, and standard next-step management is a second dose of IVIG, given the ongoing risk of coronary artery aneurysm with unresolved inflammation. Continuing aspirin alone without additional anti-inflammatory therapy does not adequately address ongoing resistant inflammation. Moving straight to a maintenance low-dose aspirin regimen assumes resolution of the acute inflammatory phase, which has not occurred here. Persistent fever after IVIG does not mean the original diagnosis was wrong; it defines resistant disease requiring escalated therapy, not diagnosis reversal. This is an inflammatory, not primarily infectious, process, so empiric antibiotics do not address the underlying issue.

57. D. Palpable purpura in a gravity-dependent distribution, with arthritis, abdominal pain, and renal involvement (hematuria) following a preceding infection, is the classic tetrad of IgA vasculitis (HSP), typically managed supportively with monitoring for renal involvement. ITP causes petechiae/purpura

from thrombocytopenia but does not classically cause this specific tetrad including arthritis, abdominal pain, and hematuria, and platelet counts are normal in HSP. Meningococemia causes a petechial/purpuric rash but with a toxic, septic appearance and typically a more rapidly progressive, life-threatening course, not this more indolent tetrad. Non-accidental trauma bruising would not typically present with this specific palpable purpuric distribution plus joint, GI, and renal findings together. Acute rheumatic fever follows strep pharyngitis with migratory arthritis and carditis, not this purpuric rash and renal pattern.

58. E. Quotidian (daily spiking) fevers, an evanescent salmon-colored rash coinciding with fever, and polyarthritis, with negative infectious workup, is the classic pattern of systemic-onset JIA (Still disease), a diagnosis of exclusion after ruling out infection and malignancy. Occult bacteremia would typically show positive cultures or a clearer infectious source rather than this specific rash-fever-arthritis pattern over weeks. Leukemia is an important consideration to rule out (given fever and joint pain) but is not the best answer once the classic quotidian fever with evanescent rash pattern is present and other features fit systemic JIA more specifically; it remains part of the differential requiring exclusion via labs like a peripheral smear, but the described classic pattern points to Still disease. Kawasaki disease has a different rash and mucocutaneous pattern and a shorter fever course (typically under 2 weeks without treatment) rather than 3 weeks of quotidian fevers. Parvovirus B19 arthritis is typically self-limited over days to a couple weeks and does not classically produce this daily spiking fever and salmon rash pattern.

59. C. The combination of malar rash, oral ulcers, arthritis, and renal involvement (proteinuria) with positive ANA and, more specifically, anti-dsDNA antibodies (which has high specificity for lupus and correlates with renal involvement) establishes a diagnosis of systemic lupus erythematosus. Juvenile dermatomyositis presents with a heliotrope rash and proximal muscle weakness rather than this specific malar rash, oral ulcer, and renal pattern with anti-dsDNA positivity. Drug-induced lupus typically presents with anti-histone antibodies rather than anti-dsDNA, and usually spares the kidneys, unlike this presentation. Mixed connective tissue disease is characterized by anti-U1-RNP antibodies with overlapping features of several rheumatologic diseases, not this specific anti-dsDNA-positive picture. Fibromyalgia does not cause a malar rash, oral ulcers, or proteinuria, and a positive ANA alone without these specific clinical findings would not support this diagnosis.

60. E. New hypertension and worsening proteinuria in HSP indicate evolving nephritis, a recognized complication that requires nephrology involvement, closer monitoring, and consideration of biopsy to guide whether additional therapy (such as immunosuppression) is needed, since renal involvement is the main long-term morbidity of HSP. Reassuring without further evaluation ignores a real risk of progressive kidney injury that needs monitoring. Stopping follow-up once the rash resolves would miss ongoing renal involvement, which can evolve independently of the skin findings. There is no indication of infection here, so empiric antibiotics for a presumed UTI would not address the actual issue (glomerular disease from HSP). Immediate dialysis is a significant overreaction to new-onset hypertension and proteinuria without first establishing the degree of renal impairment through appropriate stepwise evaluation.

61. A. Polyuria and polydipsia with inappropriately dilute urine despite a high serum osmolality (indicating the kidney is not concentrating urine appropriately in response to a real osmotic stimulus) is the classic pattern of diabetes insipidus, requiring further workup (such as a water deprivation test) to distinguish central from nephrogenic causes. Type 1 diabetes causes polyuria and polydipsia but with glucosuria and hyperglycemia, which is specifically absent here. Primary polydipsia would typically show a low or low-normal serum osmolality (from excess water intake diluting the serum), the opposite pattern from the elevated serum osmolality described. SIADH causes concentrated urine with dilutional hyponatremia and low serum osmolality, the opposite pattern from what's described here. Chronic kidney disease could impair urine concentrating ability but would typically show other markers of renal dysfunction (elevated creatinine) rather than this isolated pattern in an otherwise well child.

62. A. Hyponatremia with low serum osmolality, inappropriately concentrated urine, and euvolemia in the setting of a CNS infection is the classic picture of SIADH, where excess ADH causes water retention and dilutional hyponatremia, typically managed with fluid restriction. DI causes hypernatremia from excess free water loss, the opposite sodium abnormality from what's described. Simple dehydration from poor intake would more typically cause hypernatremic or isonatremic dehydration with signs of volume depletion, not this euvolemic dilutional hyponatremia with concentrated urine. Adrenal insufficiency with salt-wasting would typically also show hyperkalemia and signs of volume depletion (from aldosterone deficiency), a different pattern than this euvolemic SIADH picture. Osmotic diuresis (as in hyperglycemia) causes water and solute loss leading to volume depletion, not this euvolemic dilutional hyponatremia.

63. C. Fever, marked tachycardia, agitation, and GI symptoms in a patient with known Graves disease who stopped her medication is thyroid storm, a life-threatening emergency requiring a multi-pronged approach: beta-blockade for symptom control, antithyroid drugs to block new hormone synthesis, iodine solution (given after antithyroid drugs) to block hormone release, and supportive care. Restarting low-dose medication alone as an outpatient dramatically underestimates the severity and urgency of thyroid storm. Radioactive iodine is a longer-term definitive treatment for Graves disease and is not used in the acute management of thyroid storm; it can actually worsen an acute storm by releasing stored hormone. IV fluids alone address supportive needs but do not treat the underlying thyrotoxic crisis. While infection can precipitate thyroid storm and should be evaluated for, treating with antibiotics alone without addressing the thyrotoxicosis itself would miss the life-threatening primary process.

64. E. The combination of congenital heart disease, characteristic facial features, and neonatal hypocalcemic seizures should raise strong suspicion for 22q11.2 deletion syndrome, in which parathyroid hypoplasia leads to hypoparathyroidism and hypocalcemia; genetic testing and endocrine/immunologic evaluation should follow. Hypoglycemia is a separate metabolic derangement and would not by itself explain a low ionized calcium; the labs here specifically point to a calcium, not glucose, problem. Congenital hypothyroidism typically presents with more nonspecific findings (poor feeding, lethargy, jaundice) rather than acute hypocalcemic seizures, and is not specifically linked to the described congenital heart disease and facial features. Vitamin D toxicity would cause hypercalcemia, not hypocalcemia, the opposite of what's described. Maternal hyperparathyroidism can cause neonatal

hypocalcemia (from fetal parathyroid suppression), but this would not explain the associated congenital heart disease and facial features, which specifically point to a chromosomal syndrome instead.

65. E. This is an adrenal (Addisonian) crisis in a child with known CAH who missed stress-dosing during illness, and immediate management requires IV stress-dose hydrocortisone plus isotonic fluids (and dextrose if hypoglycemic), since cortisol deficiency during illness can be rapidly life-threatening. Oral maintenance dosing is inadequate during an acute crisis, which requires higher IV stress dosing. Adrenal crisis is a clinical emergency; waiting for confirmatory labs before treating risks patient deterioration and death, so treatment should not be delayed for lab confirmation in a clearly at-risk patient with this presentation. Treating only the hyperkalemia ignores the life-threatening underlying cortisol deficiency driving the whole picture. Glucocorticoid (hydrocortisone) itself has mineralocorticoid activity at stress doses and is essential; mineralocorticoid alone would not address the acute glucocorticoid deficiency.

66. A. Sudden headache with bradycardia and hypertension (Cushing triad) during DKA treatment is a classic warning sign of cerebral edema, a life-threatening complication, and treatment (hypertonic saline or mannitol) plus reducing fluid administration should begin immediately based on clinical suspicion, without waiting for imaging. Increasing the fluid rate would worsen cerebral edema, which is precisely the opposite of the needed intervention. Increasing the insulin rate does not address the acute neurologic emergency and risks a too-rapid osmotic shift, which can worsen cerebral edema. Waiting for a head CT before treating clinically suspected cerebral edema risks fatal delay, since this is a clinical diagnosis requiring immediate empiric treatment. Attributing these specific vital sign and neurologic changes to simple fatigue would miss a life-threatening emergency requiring immediate intervention.

67. B. The single most valuable diagnostic step in unexplained hypoglycemia is a 'critical sample' drawn at the actual time of hypoglycemia (before treatment or as close to it as possible), including insulin, cortisol, growth hormone, and markers of fatty acid oxidation/ketosis, since these values lose their diagnostic value once glucose has been corrected. A glucose level drawn the next day, after treatment, no longer reflects the hypoglycemic state and cannot help identify the cause. A CBC does not evaluate the hormonal or metabolic pathways responsible for hypoglycemia. A urine culture evaluates for infection, not the metabolic cause of hypoglycemia. A chest x-ray is not relevant to the hypoglycemia workup.

68. B. A well newborn who deteriorates after the first days of feeding, with poor feeding, lethargy, tachypnea (often from a compensatory respiratory alkalosis), and markedly elevated ammonia with a normal glucose, is the classic presentation of a urea cycle defect, a type of inborn error of metabolism, requiring urgent metabolic workup and ammonia-lowering therapy. Sepsis is an important differential to rule out (and often is empirically covered), but it would not specifically explain a markedly elevated ammonia level, which points toward a metabolic rather than infectious cause. Simple overfeeding would not cause this degree of illness or a markedly elevated ammonia level. Congenital hypothyroidism presents more insidiously (poor feeding, jaundice, hypotonia over weeks) rather than this acute

hyperammonemic crisis. Neonatal abstinence syndrome presents with irritability, tremors, and feeding difficulty related to in-utero exposure, not a markedly elevated ammonia level.

69. A. Classic metaphyseal lesions (corner or bucket-handle fractures) are highly specific for abusive trauma, especially in a non-ambulatory infant with no reported trauma history, and this finding should prompt a full abuse evaluation and child protective services involvement. This is not a normal developmental variant. Osteogenesis imperfecta is part of the differential for fractures with minimal trauma and should be considered/ruled out, but it does not typically produce this classic, highly specific metaphyseal pattern, and it should not be assumed as the sole explanation without appropriate evaluation. Birth-related fractures (such as clavicle fractures) would have healed and remodeled well before 4 months and would not present as an acute-appearing metaphyseal lesion at this age. Rickets can cause fractures with minimal trauma but has characteristic radiographic features (physeal widening, fraying) distinct from a classic metaphyseal lesion, and would not be the most likely single explanation for this specific fracture pattern.

70. C. When sexual abuse is disclosed, mandated reporting to child protective services is required, and referral to a specialized forensic/child abuse evaluation team (with appropriate expertise and equipment) is the appropriate next step, rather than repeated questioning by non-specialized providers, which can be traumatizing and can compromise the integrity of any future investigation. A non-specialized genital exam in the ED is not the appropriate setting when a delayed disclosure with no acute injury allows time to arrange a specialized evaluation. Repeatedly pressing a child for details is not recommended, since it can be distressing and can affect statement reliability. Reporting is mandated regardless of family confirmation and should not be delayed pending the family's own assessment. Discharging with no action fails the mandated reporting obligation regardless of the absence of acute physical injury.

71. B. A pattern of caregiver-reported symptoms that are never independently witnessed, that resolve in the caregiver's absence, alongside extensive unrevealing workups, raises concern for medical child abuse, requiring a multidisciplinary team approach including social work/child protection, since the child is at ongoing risk. Pursuing ever more advanced genetic testing without addressing this concerning pattern risks subjecting the child to unnecessary procedures while missing the actual safety issue. Dismissing this as simple parental anxiety fails to recognize a pattern consistent with a recognized form of child abuse requiring protective intervention. While the caregiver's own psychological state is relevant to the broader picture, focusing only on a psychiatric referral for the mother without protecting the child ignores the immediate safety needs of the child, who is the patient at risk. A primary conversion disorder in the child does not fit a pattern where symptoms are only ever reported (not witnessed) and specifically resolve in a particular caregiver's absence.

72. C. In a pre-mobile infant, bruising in the torso, ears, or neck regions (the basis of the 'TEN-4' bruising rule, which also includes bruising in infants under about 4 months of age) is a recognized high-specificity marker for abusive injury, given that these areas are not typically injured through normal infant handling or developmental activity, and this warrants a full evaluation including skeletal survey consideration. Bruising in a non-mobile infant is not an expected, benign finding and should never be

dismissed without evaluation. Shin and knee bruising is typically associated with normal ambulatory/mobile toddlers, not a 3-month-old, and framing concern around only those locations misapplies the age-specific screening logic. Normal diapering does not typically cause bruising in these specific locations (torso, ears, neck). A single bruise's significance depends heavily on the infant's developmental stage and the bruise's location, so a blanket statement that no single bruise is ever concerning is inaccurate, especially in a pre-mobile infant with high-risk-location bruising.

73. D. A fluctuant, pointing skin lesion indicates an abscess, and the primary treatment for an abscess is incision and drainage, since antibiotics alone often do not adequately treat a walled-off purulent collection; antibiotics may be added based on the extent of surrounding cellulitis or patient risk factors. Antibiotics alone, without drainage, often fail to resolve a true abscess because the collection is not well penetrated by systemic therapy. Warm compresses alone do not provide definitive source control for a fluctuant collection requiring drainage. IV antibiotics alone have the same limitation as oral antibiotics alone: without drainage, a true abscess frequently persists or worsens. Observation alone delays definitive treatment of an abscess that will not resolve without drainage.

74. E. Fever, targetoid lesions, and mucosal involvement after starting a new medication (a classic anticonvulsant trigger) with limited body surface area sloughing describes Stevens-Johnson syndrome, and the essential first step is immediate discontinuation of the causative drug, combined with supportive care often best delivered in a burn unit or specialized setting given the mucocutaneous involvement. Continuing the drug at a reduced dose risks progression of a severe, potentially life-threatening reaction. Antihistamines alone do not address the underlying severe cutaneous adverse reaction and outpatient discharge is inappropriate given the mucosal involvement and risk of progression. Adding a second anticonvulsant does not address the drug reaction and could introduce a new potential trigger. Topical steroids alone, as an outpatient, do not provide adequate management for SJS, which requires close monitoring of fluid status, wound care, and specialist involvement.

75. A. Rapidly spreading, punched-out vesicular/crusted lesions with fever in a child with underlying atopic dermatitis is classic for eczema herpeticum, a disseminated HSV infection requiring systemic antiviral therapy and often hospitalization, given the risk of systemic spread. Increasing topical steroid potency alone can worsen a herpetic superinfection by further suppressing local immune response and does not treat the underlying viral infection. Antibiotics alone do not treat a viral (HSV) process, though secondary bacterial infection can sometimes coexist and be addressed separately. Emollients alone do not treat the underlying viral infection and observation risks systemic dissemination. Antifungal therapy does not address a herpes viral infection and would be the wrong category of treatment entirely.

76. A. Classic target lesions following an infectious trigger (*Mycoplasma* is a well-recognized cause), with only mild mucosal involvement and no significant skin sloughing or toxic systemic appearance, is consistent with erythema multiforme, which is generally milder and more self-limited than SJS/TEN. SJS involves more significant mucosal and epidermal detachment with systemic toxicity, which is specifically described as absent here. TEN involves even more extensive skin sloughing (over 30% BSA) with severe systemic illness, which does not match this milder presentation. Urticarial drug

reactions present as evanescent wheals rather than fixed targetoid lesions with a dusky center. Meningococcemia causes a petechial/purpuric rash with a toxic, septic appearance, not classic target lesions following a *Mycoplasma* infection.

77. B. Pain out of proportion to exam findings, rapid progression, dusky skin changes with bullae, and systemic toxicity (fever, hypotension) following even minor skin trauma are red flags for necrotizing fasciitis, a surgical emergency requiring emergent surgical debridement plus broad-spectrum antibiotics. Simple cellulitis does not typically cause pain out of proportion to exam findings, rapid dusky skin changes, or hypotension. Contact dermatitis is a superficial, non-systemic process without fever, hypotension, or the described rapid deep tissue involvement. Erysipelas is a more superficial dermal infection with sharply demarcated erythema, without the deep, rapidly progressive, systemically toxic features described here. A simple insect bite reaction would not cause systemic toxicity, hypotension, or this rapidly progressive dusky skin change.

78. C. Rapidly progressive purpura with fever, toxicity, and hypotension is a classic presentation of meningococcemia with purpura fulminans, a fulminant, life-threatening process requiring immediate empiric antibiotics and aggressive resuscitation without delay, since mortality rises sharply with any delay in treatment. Outpatient dermatology referral is entirely inappropriate for a septic, hemodynamically unstable child requiring emergent inpatient management. Topical corticosteroids do not address an underlying life-threatening systemic infection. Waiting for culture confirmation before starting antibiotics in a toxic-appearing, hypotensive child risks rapid deterioration and death; empiric treatment must begin immediately based on clinical suspicion. This is not an allergic process, and antihistamines would not address the underlying septic process.

79. A. Excessive cow's milk intake (low in iron and associated with reduced solid food/iron intake, and potentially GI blood loss) combined with microcytic anemia and a low ferritin (a direct marker of low iron stores) confirms iron deficiency anemia, managed with dietary modification and iron supplementation. Thalassemia trait causes microcytosis but typically with a normal or even elevated ferritin and normal-range hemoglobin or mild anemia, not a clearly low ferritin reflecting depleted iron stores. Anemia of chronic inflammation typically shows a normal or elevated ferritin (as an acute phase reactant) despite functional iron restriction, the opposite of the low ferritin described here. B12 deficiency causes macrocytic, not microcytic, anemia. Hereditary spherocytosis causes a hemolytic anemia, usually with an elevated reticulocyte count and normal-to-elevated MCV, not this iron-deficient microcytic picture with low ferritin.

80. C. New respiratory symptoms with a new infiltrate and hypoxia in a hospitalized sickle cell patient defines acute chest syndrome, a leading cause of mortality in sickle cell disease, requiring prompt multimodal management including incentive spirometry, oxygen, antibiotics (covering both typical and atypical organisms), and often simple or exchange transfusion for hypoxia or clinical worsening. While infection is often a component, acute chest syndrome in sickle cell disease has a distinct pathophysiology (including vaso-occlusion and fat embolism) and management approach (incentive spirometry, transfusion consideration) beyond standard CAP management in a child without sickle cell

disease. Pulmonary embolism is part of the differential in some cases but is not the primary diagnosis suggested by this classic triad, and transfusion is a core part of acute chest syndrome management that should not be dismissed. Costochondritis would not explain hypoxia and a new infiltrate. Asthma can coexist with sickle cell disease and worsen outcomes, but this specific combination of fever, new infiltrate, and hypoxia in a sickle cell patient is defined as acute chest syndrome requiring its specific management approach.

81. B. Isolated severe thrombocytopenia following a viral illness, with an otherwise normal CBC and peripheral smear (no blasts, no anemia, no schistocytes), in an otherwise well-appearing child is the classic presentation of ITP, an autoimmune process, typically managed with observation or, if bleeding risk is significant, IVIG or corticosteroids. Leukemia typically presents with additional abnormalities (anemia, abnormal white cell counts, or blasts on smear), which are specifically described as absent here. DIC would show coagulation abnormalities and typically occurs in the context of an acute severe illness (sepsis, trauma), not this isolated, otherwise-well presentation. HUS presents with thrombocytopenia alongside anemia and acute kidney injury, not an isolated platelet abnormality with an otherwise normal CBC. Aplastic anemia would show pancytopenia (low counts across all cell lines), not an isolated thrombocytopenia with normal other counts.

82. D. Recurrent hemarthroses, prolonged bleeding after procedures, a normal platelet count, an isolated prolonged aPTT with a normal PT, in a male, is the classic pattern of hemophilia A or B (intrinsic pathway factor deficiency), requiring factor level testing to confirm and guide replacement therapy. Von Willebrand disease more classically causes mucocutaneous bleeding (epistaxis, easy bruising) with a variable aPTT pattern, and while it's an important differential, the specific combination of recurrent hemarthroses with an isolated prolonged aPTT and normal PT most classically points to hemophilia. Vitamin K deficiency affects factors II, VII, IX, and X, typically prolonging both PT and aPTT (though PT is often affected earlier/more), not this isolated aPTT prolongation pattern. ITP causes a low platelet count with normal coagulation studies, not this normal-platelet, prolonged-aPTT pattern. DIC would show abnormalities in both PT and aPTT along with thrombocytopenia and low fibrinogen, not this isolated, chronic, joint-focused bleeding pattern.

83. C. Fever with neutropenia (ANC under 500) in an oncology patient is a medical emergency given the high risk of rapidly progressive, life-threatening infection, and management requires prompt blood cultures followed immediately by empiric broad-spectrum IV antibiotics, without waiting for culture results. Waiting for cultures before treating risks rapid deterioration and sepsis in a neutropenic patient with limited ability to mount a normal infectious response. Oral outpatient antibiotics are inadequate for febrile neutropenia in most standard risk-stratification protocols, which call for prompt IV antibiotics, at least initially. Antipyretics alone do not address the underlying infection risk and would be an inadequate, dangerous response to febrile neutropenia. Delaying any treatment until neutrophil recovery ignores the urgent infection risk present right now, while counts remain low.

84. B. Unilateral calf swelling (suggesting DVT) followed by pleuritic chest pain and dyspnea, in a patient with multiple risk factors (immobilization, estrogen-containing contraceptives), is highly

concerning for pulmonary embolism, and urgent imaging is needed to confirm and guide anticoagulation therapy. Reassuring without evaluation ignores a potentially life-threatening combination of symptoms and risk factors. Attributing the chest pain to a musculoskeletal strain without imaging risks missing a PE, which can be rapidly fatal if untreated. Treating only for cellulitis would miss the more urgent possible PE and does not match the described unilateral swelling pattern more suggestive of DVT than infection. Discharging home without further evaluation is unsafe given the acute, high-risk combination of symptoms present.

85. D. Anaphylaxis (multi-system involvement: skin, respiratory) requires immediate intramuscular epinephrine as first-line treatment; delaying epinephrine in favor of other agents is associated with worse outcomes. Antihistamines can help with cutaneous symptoms but do not reverse the life-threatening airway and cardiovascular effects of anaphylaxis and should never substitute for epinephrine. Bronchodilators can help wheezing but do not address the broader anaphylactic process (airway edema, potential hypotension) the way epinephrine does. Corticosteroids have a delayed onset of action and are not appropriate as the sole first-line treatment for acute anaphylaxis. Observing without treatment in true anaphylaxis risks rapid progression to airway obstruction or cardiovascular collapse.

86. A. Recurrent severe infections beginning very early in infancy, with failure to thrive, an absent thymic shadow, and markedly low lymphocyte counts, is classic for SCID, a life-threatening primary immunodeficiency requiring urgent immunology evaluation and consideration of hematopoietic stem cell transplant. Transient hypogammaglobulinemia of infancy is typically a milder, self-resolving condition without this severity of infections or lymphopenia. Selective IgA deficiency is often asymptomatic or causes milder recurrent sinopulmonary infections, not this severe, early, multi-organ-system pattern with lymphopenia. Normal childhood viral infections do not typically cause this severity, this early onset, or this degree of lymphopenia and thymic absence. Chronic granulomatous disease typically presents with recurrent catalase-positive bacterial and fungal infections (abscesses, lymphadenitis) rather than this pattern of severe infections with lymphopenia and an absent thymic shadow.

87. B. Fever, urticaria, arthralgia, and lymphadenopathy occurring roughly 1-2 weeks after starting a medication (classically certain antibiotics) is the classic delayed hypersensitivity pattern of serum sickness-like reaction, managed by stopping the offending drug and supportive/anti-inflammatory treatment. True IgE-mediated anaphylaxis occurs rapidly (minutes to a couple hours) after exposure, not with this 10-day delayed onset. Kawasaki disease has its own specific diagnostic criteria (prolonged fever plus mucocutaneous findings) and is not specifically linked to a temporal medication trigger like this. A viral exanthem is possible but the clear temporal relationship to a new medication with this specific symptom complex (urticaria, arthralgia, lymphadenopathy) points more specifically to a drug-related serum sickness-like reaction. HSP presents with palpable purpura, abdominal pain, and arthritis, not primarily urticaria, and is not classically linked to a medication trigger this way.

88. C. Because biphasic anaphylactic reactions (a recurrence of symptoms hours after apparent resolution) are a recognized risk, patients are typically observed for a period after initial symptom

resolution before being considered safe for discharge, with the exact duration guided by reaction severity and clinical judgment. Discharging immediately with no observation period ignores this recognized biphasic reaction risk. Admitting to the ICU for a full week is a significant overreaction for a patient who has responded well to treatment and does not reflect standard practice. Discharging without prescribing an epinephrine auto-injector and clear after-care instructions leaves the patient unprepared for a potential future reaction. A 5-minute observation period is far too brief to meaningfully capture the risk window for a biphasic reaction.

89. B. A level plotting above the treatment line on the nomogram indicates significant risk of hepatotoxicity, and N-acetylcysteine should be started promptly, since it is highly effective at preventing liver injury when given before significant damage occurs. Observing without treatment despite a level indicating treatment need risks progression to hepatotoxicity, since acetaminophen toxicity is often clinically silent early on. Charcoal is most effective within about 1-2 hours of ingestion and, at 6 hours out, is not definitive treatment on its own once a toxic level is confirmed; NAC is now indicated. Waiting for LFTs to become abnormal means waiting for liver injury to already be occurring, which defeats the purpose of the nomogram-guided preventive treatment. Hemodialysis is reserved for specific severe scenarios (such as massive ingestion with very high levels or fulminant failure), not as first-line therapy here.

90. C. Iron tablets are radiopaque, so an abdominal x-ray helps estimate pill burden, and a serum iron level helps assess severity; whole bowel irrigation (not activated charcoal, which does not bind iron well) is used for significant pill burdens to reduce absorption. Activated charcoal does not effectively adsorb iron and is not the appropriate decontamination method for iron ingestion. Vomiting does not reliably indicate complete clearance of ingested tablets and should not be used to avoid further evaluation of a potentially serious ingestion. Antacids do not address systemic iron toxicity and are not a definitive treatment. Waiting 24 hours risks missing the early treatment window for a potentially severe, rapidly progressive toxic ingestion.

91. B. An esophageal button battery can cause rapid, severe tissue injury (including fistula formation) within hours, so even an asymptomatic child needs urgent imaging to localize the battery, with emergent endoscopic removal if it is lodged in the esophagus; a battery that has passed into the stomach in an asymptomatic child may be managed differently. Observing at home risks a delay in recognizing ongoing esophageal injury from a battery that has not passed, which can progress rapidly and severely even without symptoms initially. Activated charcoal does not bind or remove a battery and is not the appropriate management. Inducing vomiting is not recommended and can risk aspiration or does not reliably relocate the battery safely. Waiting 24 hours for spontaneous passage is unsafe if the battery is still lodged in the esophagus, given how quickly tissue injury can progress.

92. C. A bite from an animal with unknown vaccination status that cannot be observed or tested is treated as a potential rabies exposure, and post-exposure prophylaxis (both rabies immune globulin at the wound site and the vaccine series) should begin promptly, since rabies is essentially universally fatal once symptomatic but highly preventable with timely prophylaxis. While rabies risk varies by region

and animal type, an unknown-status stray animal that cannot be observed is treated as a genuine risk requiring prophylaxis rather than dismissed. Waiting for neurologic symptoms means waiting for a disease that, by that point, is essentially untreatable; prophylaxis must be given before symptom onset. Wound care alone is necessary but not sufficient; specific rabies prophylaxis is also needed given the exposure risk. Both rabies immune globulin and vaccine together are standard post-exposure prophylaxis for a high-risk exposure; giving vaccine alone without immune globulin under-treats a significant exposure.

93. A. Even with an initially reassuring exam, submersion injury can be followed by delayed pulmonary edema or respiratory deterioration over several hours, so a period of observation and monitoring is standard practice before considering discharge. Discharging immediately without any observation period risks missing a delayed deterioration. Immediate intubation is not indicated in a child who is currently breathing well and stable; treatment should match the child's actual clinical status, escalating only if needed. Therapeutic hypothermia protocols are used in specific post-arrest neuroprotection contexts, not routinely in an alert, breathing child after a brief submersion. Even a brief submersion time warrants some period of monitoring given the recognized risk of delayed symptoms.

94. D. Severe hypothermia (this deep, with altered mental status and a very slow pulse) requires active internal/core rewarming methods (such as warmed IV fluids and other active techniques) in a carefully monitored setting, along with gentle handling, since the hypothermic heart is prone to dangerous arrhythmias with rough handling or overly aggressive peripheral rewarming. Rapid immersion in very hot water risks peripheral vasodilation causing a further core temperature drop (afterdrop) and can precipitate arrhythmias in severe hypothermia. Vigorous massaging of the extremities can dislodge cold, acidotic peripheral blood centrally, worsening cardiac status, and can trigger arrhythmias in severely hypothermic patients. Passive rewarming with blankets alone is inadequate for this degree of severe hypothermia with altered mental status. A potassium bolus is not an appropriate rewarming intervention and could be dangerous.

95. A. Heat stroke (marked hyperthermia with altered mental status) requires immediate aggressive cooling, ideally cold water immersion, as the top priority, since the speed of cooling is directly tied to outcome and organ damage risk. Oral fluids and passive rest alone do not provide the rapid core temperature reduction needed in true heat stroke with altered mental status. Antipyretics (like acetaminophen or NSAIDs) work through a different mechanism (resetting the hypothalamic set point) and are not effective for the environmentally driven hyperthermia of heat stroke; rapid physical cooling is what's needed. Waiting for labs delays essential cooling that should begin immediately on recognition. Cooling should begin on-site immediately rather than being delayed until hospital arrival, since 'cool first, transport second' is the guiding principle for heat stroke.

96. B. A confirmed epidural hematoma, even a small one without current midline shift, requires close inpatient monitoring and neurosurgical consultation, since these can expand and lead to rapid deterioration, particularly given the classic pattern of an initial lucid interval followed by decline. Discharging home despite a confirmed intracranial bleed is unsafe given the risk of delayed

deterioration. Purely outpatient management with vague return precautions does not provide the close monitoring needed for a known intracranial hemorrhage. Waiting 2 weeks to repeat imaging ignores the acute risk period for hematoma expansion, which is typically within the first hours to days. While non-accidental trauma should always be considered when the history and injury pattern don't fit, this vignette describes a plausible accidental mechanism (unhelmeted bicycle fall) consistent with the injury, and management should not default to assuming abuse without a discordant history or exam.

97. A. Significant burns (generally above about 10-20% TBSA in children) require formal calculated IV fluid resuscitation based on weight and burn surface area, with the rate titrated to a urine output goal, since large burns cause substantial fluid shifts and third-spacing. Restricting fluids in a significant burn risks inadequate resuscitation and end-organ hypoperfusion. Topical care addresses the wound itself but does not address the systemic fluid resuscitation needs of a large burn. A single fixed bolus without further weight- and surface-area-based titration does not match evidence-based burn resuscitation, which requires ongoing calculated titration. Oral fluids alone are inadequate for a burn of this size given the significant fluid losses and the need for reliable, precisely titrated fluid delivery.

98. D. Tricyclic antidepressant toxicity causes sodium channel blockade leading to QRS widening and can progress to life-threatening arrhythmias; IV sodium bicarbonate is the specific first-line treatment to narrow the QRS and reduce cardiotoxicity by increasing extracellular sodium and altering pH. Activated charcoal can help with GI decontamination in some scenarios but does not treat the acute cardiotoxicity already present with a widened QRS. Calcium channel blockers would not address the sodium channel-mediated mechanism of TCA cardiotoxicity and could worsen cardiovascular status. The QRS widening in TCA toxicity is due to sodium channel blockade, not a potassium abnormality, so giving potassium would not address the mechanism and could be harmful. Hemodialysis is not effective for TCA poisoning because TCAs are highly protein-bound and have a large volume of distribution, making them poorly dialyzable; it is not first-line treatment.

99. B. A brief, self-resolved episode of concerning symptoms in a young infant with an otherwise reassuring history and normal exam meets criteria for a lower-risk BRUE, for which guidelines support limited testing, a period of observation, and shared decision-making with the family rather than a reflexive extensive workup. Not every BRUE is higher-risk; risk stratification depends on specific features (age, duration, recurrence, exam findings), and this vignette describes a lower-risk presentation, not one automatically requiring ICU admission. SIDS is, by definition, a fatal event and cannot be the diagnosis for an infant who is alive and well on exam. Dismissing the event as a normal reflex with no further discussion ignores the value of appropriate risk stratification and family counseling. There is no seizure confirmed here, so empiric antiepileptic medication would not be an appropriate default action.

100. C. Poor weight gain despite adequate reported intake, combined with a murmur and feeding-related tachypnea, points toward an organic cause of failure to thrive, specifically increased caloric expenditure and feeding difficulty related to underlying congenital heart disease, and cardiac evaluation (echocardiogram, cardiology referral) is the appropriate next step. Assuming purely non-organic (inadequate intake) failure to thrive when intake is reported as adequate and specific organic red flags

(murmur, tachypnea with feeds) are present would miss an important underlying diagnosis. This growth pattern (crossing two major percentiles) is not normal variation and does warrant further evaluation. While psychosocial factors should always be considered in failure to thrive, the specific exam findings described here (murmur, feeding-related tachypnea) point toward an organic etiology that should be pursued rather than defaulting only to a social work referral. A single viral illness would not typically explain a downward growth trend over several months with these specific cardiac exam findings.

101. C. A positive blood culture in a child who was initially discharged for outpatient follow-up requires bringing the child back for reassessment, since it could represent true occult bacteremia (with risk of ongoing or evolving infection) rather than a contaminant, and this needs clinical correlation, possible repeat testing, and a decision about further treatment. Assuming no further action is needed ignores the possibility of true bacteremia, which can progress even if the child currently appears well. Reflexively assuming contamination without any clinical reassessment risks missing a true infection needing treatment. Starting antibiotics without any in-person reassessment skips necessary clinical correlation and further evaluation. Directing the family to a pharmacy without medical reassessment is not an appropriate way to manage a positive blood culture result.

102. B. In infants younger than about 28-60 days (with specific thresholds varying slightly by protocol), fever is managed very differently than in older children because clinical appearance is a poor predictor of serious bacterial infection risk at this age; standard practice for a neonate this young with fever is a full evaluation (blood, urine, and often CSF) with admission for empiric antibiotics while awaiting results, regardless of how well the infant looks. Discharging home with reassurance alone, based only on a well appearance, ignores the well-established limitation of clinical appearance in this very young age group. Oral antibiotics without testing does not provide the diagnostic information needed and is not appropriate empiric management at this age. Testing only urine and stopping there would miss other potential sources (bacteremia, meningitis) that the full evaluation is designed to detect. Clinical appearance alone is a reasonable major factor in older, fully immunized children but is specifically not considered sufficient in this very young age group, which is exactly why age-based protocols exist.

103. E. Fever of unknown origin evaluation is best approached systematically, using a detailed history (travel, exposures, associated symptoms), targeted exam, and staged testing guided by likely categories (infectious, rheumatologic, oncologic) rather than indiscriminate broad testing, which has low yield and can generate confusing false positives. Ordering every test simultaneously without regard to clinical likelihood is inefficient and can produce misleading incidental results. Assuming a factitious cause without a thorough evaluation risks missing a genuine underlying diagnosis and is not an appropriate default assumption. Starting empiric antibiotics without a diagnosis or clear source is not appropriate FUO management and can obscure the ability to identify a causative organism. Prolonged fever of 3 weeks is a significant finding warranting real evaluation, not reassurance without further workup.

104. B. Severe hyperkalemia with ECG changes is a cardiac emergency; IV calcium gluconate is given first to stabilize the cardiac cell membrane and reduce arrhythmia risk, followed by measures that shift potassium intracellularly (insulin/glucose, beta-agonists) and ultimately remove potassium from the

body. Oral potassium binders act too slowly to address an acute cardiac emergency and are not appropriate as the sole first treatment when ECG changes are present. Giving additional potassium would worsen an already dangerous hyperkalemia and is contraindicated. Beta-blockers are not standard first-line treatment for hyperkalemia and, in fact, non-selective beta-blockade can impair potassium's cellular shift; beta-agonists (not blockers) are used to help shift potassium intracellularly. Simply repeating the lab and waiting delays urgent, life-saving treatment for a patient with ECG changes indicating real cardiac risk.

105. A. Hypernatremic dehydration should be corrected gradually (typically over 48 hours or longer), since rapid correction of chronic hypernatremia risks cerebral edema from a rapid osmotic shift into brain cells that have adapted to the hypertonic state. Rapid correction within hours significantly raises the risk of cerebral edema and seizures. A rapid IV push of free water is both mechanistically incorrect (free water is not given as an isotonic IV push this way) and would cause a dangerously fast osmotic shift. Withholding all fluids does not address the significant dehydration present and is not appropriate management. Oral hypertonic saline would worsen, not correct, hypernatremia.

106. C. An anion gap metabolic acidosis has a defined differential that includes ketoacidosis, lactic acidosis, renal failure, and specific toxic ingestions (methanol, ethylene glycol, salicylates, among others); with normal renal function and negative urine ketones already narrowing the differential, a toxic ingestion history becomes especially relevant to pursue and test for. Shoe size has no bearing on the differential diagnosis of a metabolic acidosis. Seasonal allergies are unrelated to the pathophysiology of an anion gap acidosis. Stool color is not part of the relevant diagnostic framework for an anion gap acidosis. A family history of migraines does not inform the differential for a metabolic acid-base disturbance.

107. B. Salicylate toxicity classically produces a mixed acid-base picture: early direct respiratory center stimulation causes a respiratory alkalosis (hyperventilation, tinnitus is also a classic salicylate symptom), while accumulating organic acids simultaneously produce a metabolic acidosis, together with the vomiting described. Acetaminophen toxicity does not classically produce this specific respiratory alkalosis/tinnitus pattern; its danger relates instead to hepatotoxicity. Benzodiazepine ingestion classically causes CNS/respiratory depression (potentially respiratory acidosis from hypoventilation), not this hyperventilation-driven respiratory alkalosis pattern with tinnitus. Opioid ingestion similarly causes respiratory depression and would not produce this hyperventilation and tinnitus pattern. A modest ibuprofen ingestion would not typically produce this specific severe mixed acid-base disturbance with tinnitus.

108. C. Acute postoperative pain that is inadequately controlled with acetaminophen alone is appropriately managed with a stepwise approach that adds an opioid analgesic (often alongside a multimodal regimen including scheduled non-opioid agents), balancing effective pain control with judicious, monitored opioid use. Dismissing ongoing significant pain without further treatment leaves the child inadequately managed and is not appropriate care. Exceeding the recommended maximum acetaminophen dose risks hepatotoxicity and is not a safe way to escalate pain control. Completely

withholding further analgesia due to opioid concerns, without individualizing to the child's actual pain level, results in undertreated postoperative pain. Purely non-pharmacologic approaches alone are typically adjunctive, not sufficient as the sole treatment, for significant acute postoperative surgical pain.

109. C. Recurrent, functionally impairing chronic pain in a child with an underlying chronic disease like sickle cell disease benefits from a coordinated, multidisciplinary approach (pain specialists, hematology, and consideration of psychosocial support) combining pharmacologic and non-pharmacologic strategies tailored to the individual, rather than treating each admission in isolation. Managing only acute episodes without an overarching outpatient plan misses the opportunity to reduce crisis frequency and improve function between admissions. Assuming pain reports are primarily behavioral without further medical evaluation risks undertreating a real physiologic pain process and can be stigmatizing. Using only non-pharmacologic strategies, without appropriate medication adjustment when indicated, may leave significant pain undertreated. A single one-time consultation does not provide the ongoing, coordinated management that chronic, functionally impairing pain typically requires.

110. A. Significant hypokalemia with muscle weakness and ECG changes requires careful repletion with cardiac monitoring given arrhythmia risk, and because hypomagnesemia commonly coexists with and perpetuates diuretic-induced hypokalemia, checking and correcting magnesium is an important part of effective treatment. Withholding repletion because of the diuretic ignores the actual, potentially dangerous electrolyte abnormality that needs correction regardless of its cause. Calcium gluconate is the primary treatment for severe hyperkalemia, not hypokalemia, and would not address this patient's low potassium. A new ECG change (U wave) in significant hypokalemia is a warning sign that should prompt closer monitoring, not discontinuation of monitoring. Increasing the diuretic dose while the patient is already significantly hypokalemic would worsen the electrolyte abnormality and is inappropriate before the current derangement is addressed.

111. D. After an intentional overdose, standard care includes formal psychiatric evaluation and continuous direct observation with attention to environmental safety, since ongoing risk must be actively assessed and managed before any decisions about discharge. Discharging home once medically stable, without psychiatric evaluation, skips essential risk assessment needed after a self-harm event. Allowing unrestricted, unsupervised access to the room and visitors before a safety evaluation has occurred does not provide the monitoring needed during this vulnerable period. Assuming the event was low-risk without formal evaluation is not appropriate; risk should be actively assessed by trained clinicians, not assumed. Psychiatric involvement should be proactively arranged by the medical team as standard practice, not contingent on a family request.

112. E. Non-suicidal self-injury and suicidal behavior are related but distinct, and a denial of suicidal intent does not eliminate the need for a thorough assessment of both current risk and the underlying function of the behavior, ideally involving mental health specialists, since NSSI itself is associated with elevated future suicide risk and reflects significant distress needing support. Concluding no further assessment is needed based solely on the patient's initial statement misses the importance of a full, structured evaluation. Directly asking about suicidal thoughts in a caring, clinical way is standard

practice and does not increase risk; avoiding the topic can instead miss important safety information. Assuming the behavior is merely attention-seeking dismisses a genuine indicator of emotional distress that warrants compassionate evaluation, not judgment. Addressing only the physical wound while ignoring the underlying psychological distress misses the core clinical issue.

113. C. Standard practice for acute agitation is to attempt verbal de-escalation in a calm, reduced-stimulation environment first, reserving physical or chemical restraint for situations where de-escalation fails or there is immediate danger, since less restrictive interventions should always be tried first when safely possible. Jumping straight to physical restraint without attempting de-escalation is more restrictive than necessary and is not the recommended first step. Leaving an acutely agitated, potentially unsafe patient unattended risks harm to the patient or others and is not appropriate. Immediately medicating without any verbal de-escalation attempt skips the least restrictive intervention step recommended in standard agitation management approaches. Increasing stimulation (more visitors, more activity) in an agitated patient, especially one responding to unseen stimuli, would likely worsen rather than help the situation.

114. E. New-onset psychosis, especially with an acute course and no prior psychiatric history, warrants a thorough medical workup to rule out organic causes (infection, toxin/substance exposure, metabolic derangement, autoimmune encephalitis, and others) before attributing the presentation to a primary psychiatric disorder, since some organic causes are treatable and time-sensitive. Immediately diagnosing a primary psychotic disorder without ruling out organic causes risks missing a treatable underlying medical condition. Starting long-term antipsychotic medication before any workup skips necessary diagnostic steps and could mask or delay recognition of an organic cause. Dismissing new hallucinations and disorganized speech as typical adolescent behavior fails to recognize a significant, atypical presentation requiring evaluation. Referring only to outpatient psychiatry, without an inpatient medical workup for this acute, significant presentation, could delay diagnosis of a time-sensitive organic cause.

115. E. Acute, fluctuating confusion with disrupted sleep-wake cycles and inattention in a hospitalized, critically ill child is classic for pediatric delirium, which is common in ICU settings and managed by identifying and correcting contributing factors (sleep disruption, pain control, medication review, metabolic issues) alongside supportive care. Attributing this acute fluctuating presentation to a new primary psychiatric disorder overlooks the much more likely and treatable diagnosis of delirium in this clinical context. This pattern (fluctuating confusion, inattention, disrupted sleep-wake cycle) is not simply normal or expected hospitalized behavior and should prompt evaluation and intervention. While abuse should always be considered when a presentation is unexplained, this specific pattern in the context of a prolonged ICU stay is a recognized, common, and treatable phenomenon (delirium) and does not, by itself, indicate abuse as the first-line concern. Simply ignoring the presentation as an expected medication side effect without evaluation misses the opportunity to identify and correct modifiable contributing factors.

116. A. Delirium is characterized by an acute onset and a fluctuating course, closely linked temporally to an underlying medical illness or critical care course, which is the key feature distinguishing it from

most primary psychiatric illnesses, which typically have a more gradual onset and different (usually non-fluctuating) course. A gradual onset over months with a stable picture is more typical of a chronic primary psychiatric or developmental condition, not acute delirium. A family history of a specific psychiatric disorder does not itself distinguish delirium (which is a medical, not primarily psychiatric, syndrome) from a primary psychiatric illness. Delirium symptoms characteristically fluctuate, often worsening at night ('sundowning'), rather than remaining constant regardless of time or medical status. Full, consistent orientation throughout the hospitalization would argue against, not support, a diagnosis of delirium, which typically involves disorientation as a core feature.

117. A. Conversion disorder (functional neurologic symptom disorder) is a genuine, involuntary condition, and appropriate management includes a reasonably thorough workup to exclude organic causes, paired with a supportive, validating approach and mental health involvement, since dismissing the symptoms as 'not real' is both inaccurate and can worsen the presentation. Telling the family the symptoms are not real is inaccurate (the symptoms are real and involuntary, even without an organic cause) and can damage the therapeutic relationship. Skipping medical workup entirely risks missing an organic cause, while jumping straight to long-term psychiatric hospitalization is a disproportionate and premature response before an integrated diagnostic and treatment plan is developed. Assuming malingering (conscious, intentional symptom production for secondary gain) is a different and much less common diagnosis than conversion disorder and should not be assumed without careful evaluation. Once an appropriately thorough initial workup is reassuring, repeated invasive testing is not appropriate and can reinforce illness behavior.

118. E. Recurrent functional abdominal pain, after an appropriately reassuring initial evaluation, is best managed with a biopsychosocial framework that validates the real physical pain while also addressing contributing psychosocial factors (such as school stress), generally without a need for repeated extensive testing once serious organic causes have been reasonably excluded. Assuming the pain is fabricated dismisses a genuine, common pediatric condition and can be harmful to the therapeutic relationship. Exploratory surgery is not indicated for functional abdominal pain with a reassuring workup and would expose the child to unnecessary surgical risk. Repeating extensive invasive testing indefinitely, without new concerning findings, is not appropriate once a reasonable initial workup has been reassuring. Simply attributing the pain to school avoidance without any supportive clinical engagement fails to address the very real symptoms the child is experiencing.

119. E. Hospitalized children with autism spectrum disorder often benefit from individualized accommodations, such as maintaining routines where possible, sensory-friendly adjustments, clear/concrete communication, and close family involvement, which can meaningfully reduce distress and improve cooperation with medical care. Applying a completely unmodified standard approach ignores well-established best practices for supporting autistic patients in the hospital and can increase distress. Sedation as a first-line strategy, before trying environmental and behavioral accommodations, is more restrictive than necessary and does not address the underlying triggers of distress. Excluding caregivers, who often provide crucial insight into the child's needs and effective calming strategies, removes a valuable resource for the child's care. Assuming all distress represents a psychiatric

emergency conflates an expected reaction to a stressful, unfamiliar environment with a true acute psychiatric crisis, which are not the same thing.

120. B. Chronic home medications, including stimulants for ADHD, are generally reviewed and often continued during hospitalization for an unrelated illness unless there is a specific clinical reason to hold them (such as inability to take oral medication, or a specific new cardiac concern), since abrupt discontinuation without cause can worsen the child's functioning and behavior during an already stressful hospitalization. Automatically discontinuing all home medications regardless of clinical context is not individualized, evidence-based practice. Increasing the dose without a clinical indication is not appropriate medication management. Ignoring the ADHD diagnosis entirely during hospitalization can lead to worsened behavioral regulation, complicating care during the admission. Substituting an unrelated sedating medication without clinical reason does not appropriately address the child's actual home medication needs.

121. B. In a malnourished patient beginning nutritional rehabilitation, refeeding syndrome, and specifically hypophosphatemia (along with related hypokalemia and hypomagnesemia), is the classic and potentially life-threatening complication to monitor for, given the intracellular electrolyte shifts triggered by resumed carbohydrate metabolism and insulin release; slow, carefully monitored nutritional advancement with electrolyte monitoring and repletion is the standard approach. Hypercalcemia is not the classic refeeding-associated electrolyte disturbance. Hyperkalemia is the opposite of the expected pattern; refeeding classically causes hypokalemia, not hyperkalemia, from intracellular shifts. Hyponatremia is not the classic electrolyte disturbance associated with refeeding syndrome. Hyperphosphatemia is the opposite of the expected finding; refeeding classically causes hypophosphatemia, not hyperphosphatemia.

122. E. Significant bradycardia and orthostatic instability in the context of a restrictive eating disorder are recognized medical instability criteria that warrant inpatient medical hospitalization for stabilization, given the real risk of cardiac complications, rather than outpatient-level management. Continuing outpatient management alone, without escalating the level of care, does not address these medically unstable vital sign findings. Discharging home with only a distant follow-up appointment ignores significant, potentially dangerous vital sign abnormalities that need close inpatient monitoring. Intensive outpatient therapy, while a valuable level of care for many eating disorder presentations, is not sufficient when medical instability criteria (like this degree of bradycardia and orthostasis) are present. Reassurance alone based on the patient being alert and conversant fails to account for the significant underlying cardiovascular instability indicated by the vital sign findings.

123. D. A newborn with poor tone, apnea, and a heart rate below 100 after initial steps requires prompt positive pressure ventilation, per standard neonatal resuscitation sequencing, since effective ventilation is the single most important step in most neonatal resuscitations. Continuing only drying and stimulation without escalating is inadequate for a newborn with this degree of respiratory and heart rate compromise. Chest compressions are indicated for a heart rate that remains below 60 despite adequate ventilation, not before ventilation has even been attempted. Epinephrine is reserved for a heart rate

remaining below 60 despite effective ventilation and chest compressions, not as an initial step before ventilation. Apgar scores are assessment tools recorded at set intervals, not gating criteria that should delay necessary resuscitative interventions.

124. B. Current guidance for meconium-stained fluid emphasizes the infant's vigor at birth: a vigorous infant (good tone, strong respiratory effort, adequate heart rate) receives routine care without immediate tracheal suctioning, since routine suctioning in vigorous infants has not been shown to improve outcomes and can cause harm. Immediate intubation and suctioning regardless of vigor does not reflect current evidence-based practice, which reserves more aggressive airway intervention for non-vigorous infants with clinical concern. Delaying all care for hours to simply observe ignores the need for standard newborn assessment and care immediately after birth. Vigorous suctioning before any breaths in a vigorous infant is not the current recommended approach and is unnecessary in a vigorous newborn. Withholding oxygen indefinitely regardless of respiratory status is not appropriate individualized care; oxygen should be provided as clinically indicated based on the infant's actual status.

125. E. Infants of diabetic mothers are at recognized risk for hypoglycemia, and management for a stable infant able to feed typically starts with enteral feeding and close glucose monitoring, escalating to IV dextrose if glucose remains low, the infant is symptomatic and cannot feed adequately, or the hypoglycemia is severe. Mandating an IV dextrose bolus as the very first step in every case, without considering the infant's ability to feed, is more aggressive than necessary for many stable, feeding infants. Infants of diabetic mothers are, in fact, at meaningfully increased risk for hypoglycemia and require monitoring, not the assumption that hypoglycemia is rare in this population. Discharging home immediately after a single low glucose reading, without further monitoring or treatment, is unsafe given the ongoing risk of significant hypoglycemia. Treating with reassurance alone, given a symptomatic infant (jitteriness) with a low glucose value, under-treats a condition that requires active management.

126. A. A bilirubin level in the high-risk zone on standard hour-specific nomograms warrants initiating phototherapy, which is effective at reducing bilirubin levels and preventing progression toward levels associated with kernicterus risk. Discharging home without treatment when the level is in a high-risk zone risks progression to dangerously high bilirubin levels. Exchange transfusion is reserved for more severe hyperbilirubinemia or cases not responding to phototherapy, not as the first step for a level in this described risk zone without other severe features. Discontinuing breastfeeding entirely is not the recommended primary treatment for hyperbilirubinemia in this context; phototherapy is the standard first-line treatment, with continued breastfeeding generally supported alongside it when clinically appropriate. There's no indication of an infectious process here (no hemolysis, no other signs of infection), so antibiotics would not address this hyperbilirubinemia.

127. D. Mild, self-resolving respiratory symptoms shortly after birth (especially after cesarean delivery, which reduces the normal fluid clearance that occurs with vaginal delivery), with x-ray findings of fluid in the fissures and perihilar streaking, and improvement within the first day, is classic for transient tachypnea of the newborn, a benign, self-limited condition from delayed lung fluid clearance. RDS from surfactant deficiency is typically seen in preterm infants with a ground-glass, diffusely hazy x-ray

pattern and a more progressive, not rapidly improving, course. Neonatal pneumonia would typically show more focal or patchy infiltrates and be associated with other signs of infection, not this pattern of rapid improvement without treatment. Meconium aspiration syndrome occurs in the setting of meconium-stained fluid with a patchy, coarse infiltrate pattern, not fluid in the fissures with rapid resolution. Congenital diaphragmatic hernia presents with more severe respiratory distress, often with a scaphoid abdomen and bowel loops visible in the chest on imaging, not this mild, rapidly resolving pattern.

128. A. Severe hypoxemia disproportionate to lung disease severity, with differential cyanosis and echocardiographic evidence of elevated pulmonary pressures and right-to-left shunting without a structural cardiac defect, defines persistent pulmonary hypertension of the newborn, managed with oxygen, ventilatory support, and pulmonary vasodilator therapy (such as inhaled nitric oxide) as needed. TTN is typically mild and improves quickly, and would not cause this degree of hypoxemia with differential cyanosis and elevated pulmonary pressures on echo. A structural cyanotic heart defect is specifically ruled out here by the echocardiogram showing no structural defect, which is why PPHN (a functional, not structural, problem) is the correct diagnosis. Choanal atresia causes upper airway obstruction, particularly with feeding, not this pattern of differential cyanosis and echocardiographically confirmed pulmonary hypertension. Diaphragmatic eventration can cause respiratory difficulty from reduced lung volume but would not specifically explain this hemodynamic pattern of pulmonary hypertension with right-to-left shunting on echo.

129. B. For infants with maternal risk factors for early-onset sepsis (such as unknown or inadequately treated GBS status), standard practice uses a structured risk-assessment approach (combining specific risk factors with careful serial clinical assessment) to guide the decision about further evaluation and observation, rather than either ignoring risk factors in a well-appearing infant or automatically treating every at-risk infant with antibiotics regardless of individualized assessment. Assuming no further evaluation or observation is needed simply because the infant looks well at a single point in time ignores the recognized value of ongoing risk-based observation given a real risk factor is present. Automatically starting empiric antibiotics in every such infant regardless of a more nuanced risk assessment is more aggressive than current evidence-based, individualized approaches recommend. Discharging immediately with no additional monitoring does not reflect the recommended observation period for infants with this kind of risk factor. Waiting until the infant becomes clinically ill defeats the purpose of proactive risk-based observation, which is designed to catch early, subtle signs of illness before more overt clinical deterioration.

130. D. Clinical signs concerning for early-onset neonatal sepsis, especially with a relevant maternal risk factor (untreated GBS colonization), warrant prompt empiric IV antibiotics; the classic combination of ampicillin plus an aminoglycoside provides standard broad coverage for the most common early-onset pathogens (GBS, *E. coli*, and other common neonatal pathogens) while cultures are pending. Oral amoxicillin alone is inadequate for a possibly septic neonate, who needs IV therapy and inpatient monitoring, not outpatient oral treatment. A single oral macrolide dose does not provide appropriate coverage or route of administration for suspected neonatal sepsis. Vancomycin monotherapy does not

provide the broad gram-negative coverage needed for typical early-onset neonatal sepsis pathogens and is not the standard first-line empiric choice in this scenario. Withholding antibiotics while awaiting cultures in a symptomatic, at-risk neonate risks rapid deterioration from an evolving, potentially life-threatening infection; empiric treatment should begin promptly based on clinical suspicion.

131. A. Late preterm infants, despite often appearing similar in size to term infants, have relative physiologic immaturity that specifically raises risk for feeding difficulties, temperature instability, and hyperbilirubinemia, and these infants require closer monitoring and more cautious discharge planning around these specific issues. Congenital heart disease risk is not specifically tied to late prematurity as a gestational age category in this way; it relates to separate structural developmental factors. Autoimmune disorder risk is not specifically elevated by late preterm gestational age. Inherited metabolic disorders are determined by genetics, not gestational age at birth, so this category of risk is not specifically elevated by being late preterm. Chromosomal abnormality risk is similarly determined by genetic factors independent of gestational age at delivery, not specifically elevated by late prematurity itself.

132. C. Significant, worsening neonatal abstinence syndrome is identified through a pattern of elevated scores on a standardized withdrawal scoring tool over time, combined with clinically significant symptoms (poor feeding, marked tremors, inconsolability), which together indicate a need for pharmacologic treatment (in addition to supportive, non-pharmacologic care), rather than any single isolated finding. A single mildly elevated score, in an infant who is otherwise feeding and sleeping normally, does not by itself indicate the need for pharmacologic treatment and would typically continue to be monitored with supportive care. Normal reflexes with no other symptoms would not suggest a significant withdrawal syndrome. An isolated single sneeze, without a broader pattern of symptoms, is a common normal newborn finding and not itself diagnostic of significant withdrawal. Normal, age-appropriate sleep patterns without other findings would not suggest a significant withdrawal syndrome requiring treatment.

133. D. When non-pharmacologic measures alone are insufficient to control significant, persistent withdrawal symptoms (reflected by consistently high standardized scores), pharmacologic treatment, typically with an opioid replacement approach per standardized protocol, is the appropriate next step to safely manage the withdrawal. Continuing non-pharmacologic care alone indefinitely, despite it clearly being insufficient by the scoring pattern, under-treats a significant, symptomatic withdrawal syndrome. Discharging home with ongoing significant, poorly controlled withdrawal symptoms is unsafe. Using an unrelated sedative without a specific evidence-based role in opioid withdrawal management does not follow standard, evidence-based NAS treatment protocols. Assuming symptoms will resolve entirely without any treatment, despite already-optimized supportive care being insufficient, risks prolonged, poorly controlled withdrawal with associated complications (poor feeding, weight loss, seizures in severe cases).

134. A. A macrosomic infant with a difficult delivery complicated by shoulder dystocia, presenting with the classic 'waiter's tip' position (adducted, internally rotated arm with wrist flexion) from decreased movement, is the classic presentation of Erb palsy, an upper brachial plexus (C5-C6) birth injury,

generally managed with observation and physical therapy, since most cases improve over time. A congenital malformation unrelated to delivery would not specifically correlate with this delivery history (shoulder dystocia) and this classic postural pattern tied to a nerve injury. Simple hypotonia would not produce this specific, classic postural pattern (adduction, internal rotation, wrist flexion) associated with a nerve root injury. Klumpke palsy involves the lower brachial plexus (C8-T1), causing a claw-hand deformity, a different pattern than the described 'waiter's tip' position, which is specifically associated with upper plexus (Erb) injury. This asymmetric, abnormal arm positioning following a traumatic delivery is not a normal newborn reflex pattern and warrants evaluation, not dismissal.

135. B. Infants with cleft palate often struggle to generate the negative pressure (suction) needed for effective breastfeeding due to the palatal defect, so specialized feeding equipment designed to compensate for this (along with close weight and growth monitoring, and often involvement of feeding specialists) is the appropriate management approach. Insisting on exclusive breastfeeding without considering specialized adaptations may not adequately address the infant's specific anatomic feeding challenge and could compromise adequate growth. Withholding all oral feeding and relying solely on IV fluids indefinitely is not appropriate first-line management when specialized oral feeding techniques can often successfully support adequate intake. Feeding difficulty in infants with cleft palate is a well-recognized, real clinical issue requiring proactive intervention, not dismissal. A standard, unmodified nipple does not address the specific anatomic challenge posed by the palatal defect and is less likely to support effective feeding than specialized equipment.

136. A. A scaphoid abdomen, decreased breath sounds on the affected side, and bowel sounds heard in the chest together are the classic presentation of congenital diaphragmatic hernia, in which abdominal contents herniate into the thoracic cavity, often causing pulmonary hypoplasia and significant respiratory distress requiring specialized management, sometimes including ECMO. TTN would not cause a scaphoid abdomen or bowel sounds in the chest, and is typically a milder, rapidly resolving process. Meconium aspiration syndrome causes respiratory distress from aspirated meconium but would not produce a scaphoid abdomen or bowel sounds in the chest, which specifically indicate herniated abdominal contents. Choanal atresia causes upper airway obstruction, particularly worsened with feeding, not this specific abdominal and chest exam pattern. Tracheoesophageal fistula presents with feeding-related coughing/choking and often excessive oral secretions, not this specific scaphoid abdomen and bowel-sounds-in-chest pattern that points to a diaphragmatic defect.

137. C. A weight loss approaching or exceeding typical thresholds (generally around 7-10%, depending on specific criteria used), combined with reported latch difficulty and infrequent audible swallowing, warrants a formal breastfeeding evaluation to assess and support effective milk transfer, along with close monitoring of the infant's weight and hydration, since inadequate intake in a young newborn needs timely attention. Reassuring the family without further evaluation, despite specific concerns regarding feeding details and a notable degree of weight loss, risks missing a correctable feeding problem leading to worsening dehydration or poor growth. Immediately and permanently discontinuing breastfeeding, without first attempting evaluation and lactation support to address the identified difficulties, is a more drastic step than usually appropriate as a first response. Delaying evaluation until the standard 2-week

visit is inappropriate given the specific, concerning findings (notable weight loss, feeding difficulty) present now, in a young newborn where dehydration can progress quickly. Assuming a simply low caloric requirement, without addressing the specific reported latch and swallowing concerns, ignores a plausible and correctable explanation for the poor weight gain.

138. B. Frequent spit-up in an otherwise thriving, comfortable infant with good weight gain and no red-flag symptoms (such as bloody or bilious emesis, poor growth, respiratory symptoms, or significant distress) is consistent with uncomplicated physiologic reflux ('happy spitter'), which is managed conservatively (feeding adjustments, positioning guidance, reassurance) without a need for acid-suppressing medication, which has not been shown to help this presentation and carries its own risks. Starting acid-suppression medication as first-line treatment for uncomplicated physiologic reflux in a thriving infant is not supported by evidence and is not the recommended initial approach. An emergent upper GI series is not indicated for this reassuring clinical picture without red-flag features suggesting a structural or more serious process. Discontinuing all oral feeding is a significant overreaction to uncomplicated reflux in a well-appearing, weight-gaining infant and would be inappropriate and harmful. Urgent surgical referral is not warranted for this benign, reassuring presentation without concerning features first being present.

139. C. Spasticity management in children with cerebral palsy typically follows a stepwise approach, starting with conservative and less invasive measures (positioning, physical therapy, oral antispasmodic medications) and escalating to more invasive options (such as botulinum toxin injections or intrathecal baclofen) only if needed based on severity and response to more conservative measures. Proceeding directly to an invasive surgical or other highly invasive intervention as a first step, without trying more conservative measures, does not reflect appropriate stepwise management. Assuming nothing can be done ignores real, effective management options available for spasticity-related discomfort. Using only sedating medication without addressing positioning or physical therapy misses key non-pharmacologic components of a comprehensive approach. Dismissing the family's report of worsening symptoms during hospitalization ignores valuable caregiver input that should prompt reassessment and adjustment of the management plan.

140. A. Symptomatic sialorrhea causing functional problems (skin breakdown, aspiration risk) in a child with neurologic impairment is appropriately addressed with a stepwise approach, often starting with pharmacologic options such as anticholinergic medications, combined with supportive skin care, reserving more invasive options for cases not responsive to more conservative measures. Assuming nothing can be done, despite real complications from the sialorrhea, ignores available effective management strategies. Proceeding immediately to permanent surgical intervention as a mandatory first step skips more conservative, appropriate first-line options. Restricting all oral intake is a drastic and generally inappropriate response to sialorrhea and does not address the underlying issue in a way that supports the child's overall care and quality of life. The skin breakdown and aspiration risk described are directly related consequences of the sialorrhea and should not be dismissed as unrelated; they are part of what makes intervention appropriate here.

141. C. Children with medical complexity, especially those with altered mobility or muscle tone, often have caloric needs that differ meaningfully from typically developing peers of the same age, so an individualized assessment accounting for activity level, growth trajectory, and the specific underlying condition is the appropriate approach to determining adequate gastrostomy tube feeding volumes and composition. Using only a standard age-based estimate identical to a typically developing, fully mobile child ignores real differences in energy expenditure common in many medically complex children. Assuming caloric needs are irrelevant once a tube is placed ignores the ongoing importance of appropriately meeting nutritional needs for growth and health. Providing a fixed intake without monitoring growth over time fails to allow for adjustments as the child grows or as clinical status changes. The tube's flow rate is a technical delivery detail, not a determinant of the child's actual physiologic caloric needs, and should not be used as the basis for caloric planning.

142. E. For anticipated short-term supplemental feeding needs (days to a few weeks), a nasogastric tube is generally the appropriate, less invasive choice, with gastrostomy tube placement reserved for situations where longer-term enteral access is anticipated, given the additional procedural risk and permanence of a gastrostomy. Proceeding directly to surgical gastrostomy placement for an anticipated short-term need exposes the infant to an unnecessary surgical procedure and permanent access when a less invasive, temporary option is appropriate and sufficient. TPN is reserved for situations where the gut cannot be used, not as a default option when enteral (gut) access and function are otherwise appropriate for a temporary need. Providing no nutritional support at all while awaiting a planned procedure would risk malnutrition. A permanent jejunostomy tube is an even more invasive, permanent, and specialized option that is not appropriate as a default for a temporary supplemental feeding need.

143. D. Sudden respiratory distress in a child with a tracheostomy should prompt an assessment for tube obstruction (commonly from a mucus plug), and the immediate step is to attempt suctioning, with rapid escalation to changing the tracheostomy tube if suctioning does not relieve the obstruction, since a fully or partially obstructed tracheostomy tube is a true emergency. Removing the tube entirely without any plan for replacement or an alternative airway strategy leaves the child without a secured airway and is dangerous unless done as part of an immediate, planned tube change. Waiting several hours for possible spontaneous resolution is unsafe given the acute desaturation and increased work of breathing described, which requires immediate action. Oral antibiotics do not address an acute mechanical obstruction of the airway and would not be the appropriate immediate intervention. Simply increasing oxygen flow without addressing a possible mechanical obstruction does not resolve the underlying problem and delays necessary intervention.

144. B. Headache, vomiting, and lethargy in a child with a VP shunt are classic symptoms of shunt malfunction (obstruction or infection) causing increased intracranial pressure, and this requires urgent evaluation, typically including neuroimaging and neurosurgical involvement, given the risk of rapid neurologic deterioration if untreated. Managing this as simple gastroenteritis, without considering the shunt, risks missing a potentially life-threatening shunt malfunction. Discharging home with only routine follow-up ignores the urgency of these symptoms in a child with a shunt. Treating only with analgesics for a presumed simple headache misses the specific, higher-risk context of an implanted

shunt and these symptoms together. This symptom pattern is not normal, expected shunt function and should not be assumed to be benign without evaluation.

145. C. In medically complex children on multiple medications from different providers, thorough medication reconciliation and interaction review at each transition of care (including hospital admission) is essential, with proactive coordination among involved specialists when a significant interaction is identified, to ensure safe, well-integrated medication management. Starting a new medication without reviewing the existing list risks a known, potentially harmful interaction. Discontinuing all existing medications simultaneously, without individualized review, risks withdrawal effects or loss of needed therapy for other conditions and is not an appropriate blanket solution. Assuming full coordination has already occurred, without an active review at this admission, misses the responsibility of the current care team to verify medication safety at this specific transition point. Choosing a medication based on convenience while disregarding a known significant interaction is not safe, appropriate prescribing practice.

146. D. Many extended-release formulations rely on their physical coating or matrix structure for their controlled-release mechanism, and crushing them can cause dangerous, rapid release of the full dose (dose-dumping) or loss of efficacy, so verifying formulation-specific safety and involving pharmacy for guidance or an alternative formulation (such as an immediate-release equivalent) is the appropriate approach for tube administration. Crushing without first checking formulation-specific safety risks a dangerous dose-dumping event or other adverse effects. Assuming all oral medications are automatically safe to crush is incorrect and could lead to serious harm with certain formulations. Simply skipping the medication, without pursuing an appropriate administrable alternative, risks undertreating the underlying condition the medication is meant to address. Arbitrarily doubling the dose of a crushed extended-release tablet to compensate for presumed loss is not a safe or evidence-based practice and could cause significant overdose.

147. C. Safe discharge for a child with significant medical complexity and technology dependence (tracheostomy, gastrostomy) requires a coordinated, multidisciplinary process that verifies caregiver competency with device care, confirms that necessary home equipment, supplies, and support services are actually arranged, and establishes clear follow-up and emergency action plans, since gaps in any of these areas can lead to serious harm after discharge. Discharging as soon as the acute issue resolves, without addressing these broader safety elements, risks a preventable adverse event at home. Assuming existing family knowledge is sufficient without verification misses opportunities to identify and address knowledge or skill gaps before they become dangerous at home. Discharging without confirming that home equipment and support services are truly in place (not just ordered) risks the family being unable to safely care for the child immediately after discharge. Skipping a follow-up and emergency plan leaves the family unprepared to handle predictable complications or urgent situations after leaving the hospital.

148. A. When multiple subspecialists provide overlapping or potentially conflicting recommendations for a child with medical complexity, the coordinating team (often the primary hospitalist or attending) should facilitate direct communication among the specialists to reconcile differences and develop a

single, coherent plan, which supports both patient safety and clear communication with the family. Implementing all recommendations exactly as given, without reconciling overlap or conflict, risks contradictory or even unsafe combined care. Expecting the family to independently reconcile complex specialist recommendations places an inappropriate burden on them and risks miscommunication or unsafe care decisions. Following only the most recent recommendation without broader coordination may miss important input from other specialists relevant to the overall plan. Ignoring all specialist input and proceeding with an uninformed plan would be inappropriate and unsafe given the complexity of the case.

149. B. Goals-of-care conversations for children with life-limiting conditions are most effectively conducted through open, honest, compassionate dialogue that explores the family's values and understanding, provides clear medical information, and supports shared decision-making, ideally proactively rather than only during a crisis. Avoiding the conversation entirely to prevent distress often does families a disservice by leaving them unprepared and without needed information and support as the disease progresses. Presenting only one predetermined pathway without exploring the family's own values and questions does not reflect a genuinely shared decision-making process. Delaying the conversation until a crisis forces it removes the opportunity for thoughtful, less rushed decision-making and can add additional stress during an already difficult acute situation. Making decisions for the family without their input does not respect their central role in decisions about their child's care.

150. A. Effective pain and symptom management in pediatric palliative care involves ongoing reassessment and individualized adjustment of the regimen, often multimodal, aimed squarely at achieving comfort, since undertreated pain in this context is both a real clinical problem and a significant source of suffering. Avoiding needed medication adjustments due to general concerns, without individualizing to the child's actual symptom burden, results in unnecessary, avoidable suffering. Assuming nothing more can be done once a child is in palliative care is incorrect; symptom management remains an active, ongoing, and central part of palliative care. Relying only on non-pharmacologic measures while declining medication adjustments, despite ongoing poorly controlled pain, does not adequately address the child's actual symptom burden. Waiting for the family to specifically request a change, rather than the care team proactively reassessing and adjusting based on clinical findings, does not reflect proactive, high-quality symptom management.

151. B. Signs suggesting elevated intracranial pressure or a mass lesion (papilledema, focal neurologic deficit) are relative contraindications to immediate lumbar puncture given herniation risk, so imaging should be obtained first to assess safety, while empiric antibiotics are started promptly and should never be delayed for imaging or the LP itself, since treatment for suspected bacterial meningitis is time-sensitive. Proceeding with LP immediately despite these red-flag findings risks herniation. Delaying antibiotics until after neuroimaging is completed is not appropriate; antibiotics should be started promptly based on clinical suspicion, independent of the imaging and LP timing. Skipping LP entirely, relying on blood cultures alone, provides less specific diagnostic information about the CNS infection and is not the standard approach when LP can be safely performed (or safely delayed with imaging first,

as needed). Withholding antibiotics until after the LP is completed unnecessarily delays potentially life-saving treatment; treatment should not wait for procedural steps.

152. A. In a critically ill child with shock and difficult or delayed peripheral IV access, intraosseous access provides fast, reliable emergency vascular access for fluids and medications and is the appropriate next step rather than continuing repeated unsuccessful attempts. Continuing peripheral attempts indefinitely delays essential treatment in a time-sensitive emergency. Waiting for central line placement by a specialist team takes considerably longer than IO placement and is not appropriate as the immediate emergency step in a critically ill, shocked child. Oral rehydration is inadequate and inappropriate for a critically ill child in shock, who needs rapid IV/IO access for fluids and medications. Waiting for spontaneous stabilization without intervention is dangerous and inappropriate in a child with shock, who requires prompt active treatment.

153. C. A thorough pre-sedation assessment, including NPO status, airway examination, and relevant medical history, is essential before procedural sedation to identify risk factors that could affect sedation safety and to determine the appropriate level of monitoring and personnel needed, since sedation carries real risks including airway compromise. Proceeding without any pre-sedation assessment, even for an urgent fracture reduction, skips essential safety steps that identify risk factors needing to be addressed or accounted for. Assuming all children are equally appropriate for an identical sedation approach ignores meaningful individual variation in risk (airway anatomy, comorbidities, NPO status) that should guide the specific approach used. Procedural sedation does carry real airway risk (including potential for respiratory depression or airway obstruction), so airway assessment is a critical, not optional, part of pre-sedation evaluation. Age alone is an incomplete basis for assessing sedation safety; individual risk factors beyond age must also be considered.

154. D. When precise, continuous urine output monitoring is clinically necessary in a critically ill child who cannot reliably void independently, indwelling urinary catheter placement provides accurate, continuous measurement essential for guiding fluid management and assessing renal perfusion. Relying on diaper weight estimation alone, while sometimes reasonable in less critical circumstances, does not provide the precise, continuous data needed when accurate monitoring is specifically indicated in a critically ill child. Avoiding urine output monitoring altogether in this context misses an important, clinically necessary data point for managing a critically ill patient. Serum creatinine reflects overall renal function trends but does not provide the real-time output data needed for close fluid management in this scenario. Delaying necessary monitoring until mental status improves could mean missing this data during the very period when it is most clinically needed.

155. E. Absent breath sounds, tracheal deviation, and hypotension together are the classic clinical diagnosis of tension pneumothorax, a life-threatening emergency that requires immediate needle decompression based on clinical findings alone, without waiting for imaging, since any delay can be rapidly fatal. Obtaining a chest x-ray first delays a time-critical, clinically diagnosed emergency intervention. IV fluids alone do not address the underlying mechanical problem (a pneumothorax under tension compressing venous return and the opposite lung) causing the hypotension. Waiting for an

arterial blood gas similarly delays necessary immediate intervention for a clinically diagnosed emergency. While a formal chest tube will ultimately be needed for definitive management, immediate needle decompression is the faster first step to rapidly relieve the life-threatening pressure, with chest tube placement following shortly after.

156. C. A recently dislodged, well-established gastrostomy tract can close relatively quickly (often within hours), so prompt replacement (with the child's own tube or an appropriately sized temporary catheter if needed) is important to maintain stoma patency, followed by confirming correct position before resuming feeds. Waiting several days risks the tract closing, which would require a more invasive procedure to re-establish access. Assuming a fully new surgical tract will automatically be needed, without first attempting prompt replacement into the existing (still patent) tract, skips an appropriate and much less invasive first step. Well-established gastrostomy tracts can, in fact, close relatively quickly without prompt intervention, so this is a genuine time-sensitive concern, not a non-issue. Relying solely on oral feeding going forward, without a plan to restore reliable tube access, may not meet the child's nutritional or medication administration needs if gastrostomy feeding was medically necessary.

157. A. Conflict between families and the care team is best addressed through active listening to understand the family's underlying concerns and values, aiming for a collaborative, shared decision-making approach that respects the family's role while addressing medical needs; this often resolves apparent conflict through improved mutual understanding, or clarifies where an ethics consultation or additional support may be needed. Insisting on the original plan without further discussion does not engage with or address the family's specific concerns, which can escalate rather than resolve the conflict. Involving security or law enforcement as a first response to a disagreement (in the absence of any actual safety threat) is a disproportionate and inappropriate escalation for a communication-based conflict. Discharging the family from care without further engagement abandons the therapeutic relationship rather than working to understand and address the underlying disagreement. Simply documenting without further engagement misses the opportunity to actually address and potentially resolve the family's concerns.

158. D. Using a qualified professional medical interpreter is the appropriate standard for communicating important medical information with families who have limited English proficiency, ensuring accuracy, completeness, and respect for the family's ability to fully understand and participate in decisions about their child's care. Relying on a young family member (especially a sibling) to interpret complex medical information places an inappropriate burden on a child and risks inaccurate or incomplete communication of sensitive, complex material. Providing only written English materials does not address the underlying language barrier for a family with limited English proficiency. Communicating only through simplified gestures is inadequate for conveying important, detailed medical information. Skipping detailed information sharing because of a language barrier denies the family their right to understand and participate in their child's care; professional interpretation should be used to bridge the gap, not to justify omitting information.

159. B. For families with limited health literacy, especially with a complex regimen, using clear plain language, teach-back methods (having the family explain the plan back to confirm understanding), and simplified written aids (like a visual medication schedule) significantly improves comprehension and safe medication administration at home. Providing only complex medical terminology as documented in the chart, without simplification, is unlikely to be understood by a family with limited health literacy and risks medication errors at home. Assuming understanding based on nodding alone, without actively confirming comprehension through teach-back, is a well-recognized pitfall that can miss significant gaps in understanding. Giving only verbal instructions without written materials to reference later makes it harder for the family to correctly recall and follow a complex regimen at home. Rushing through instructions without confirming understanding undermines the goal of ensuring the family can safely manage the regimen after discharge.

160. E. Family-centered rounds are built around actively including the family (and, when appropriate, the patient) as genuine participants in the discussion, incorporating their observations and preferences, and communicating in accessible language, which supports better shared understanding and often better care and satisfaction outcomes. Discussing the case entirely outside the room and only informing the family of a final decision afterward defeats the core purpose of family-centered rounds, which is to include the family in the actual discussion process. Using only technical jargon without adaptation undermines the family's ability to meaningfully participate in and understand the discussion. Discouraging questions during rounds runs counter to the collaborative, participatory intent of family-centered rounds. Defaulting to excluding families from bedside rounds altogether, relying only on separate written updates, does not reflect the family-centered rounding model, which specifically emphasizes inclusion at the bedside.

161. A. Effective handoffs use a structured format that conveys current status, active issues, anticipated problems, and specific contingency or 'if-then' plans, with dedicated time for the receiving clinician to ask questions, since structured handoff communication is associated with reduced errors and improved patient safety at transitions of care. Providing only a name and room number omits essential clinical information needed for safe overnight coverage. Relying solely on the written chart, without verbal discussion, misses the opportunity for real-time clarification and misses nuance that structured verbal handoff communication provides. Omitting anticipated overnight issues and contingency plans leaves the covering physician less prepared to respond effectively if those anticipated issues arise. Rushing through without time for questions increases the risk that important gaps in understanding go unaddressed, which is a recognized contributor to handoff-related errors.

162. A. Appropriate triage matches the level of care to the child's actual clinical severity; a child with a mild, self-limited illness and reassuring vital signs is appropriately managed as an outpatient with supportive care and clear guidance on when to seek further care, reserving inpatient or higher levels of care for more significant illness or specific risk factors. Automatically admitting every child with any viral illness regardless of severity is not appropriate resource use and does not match care level to actual clinical need. Immediate ICU-level transfer for a mild, reassuring presentation is a significant overuse of a resource intended for critically ill children. Providing no follow-up guidance or return precautions at

all misses an opportunity to help the family recognize if the illness were to worsen and know when to seek further care. Admitting to a unit specifically reserved for critically ill children does not match this child's mild, reassuring clinical presentation and would be an inappropriate use of that level of care.

163. E. Safe interfacility transport of a critically ill child requires reasonable stabilization at the sending facility before transport (to the extent possible), along with appropriately trained transport teams and equipment to maintain that stabilization and respond to changes during transit, balancing the urgency of definitive care with transport safety. Transporting immediately with no attempt at stabilization risks significant deterioration during transit without adequate ability to intervene. Using non-specialized transport without attention to monitoring or personnel needs risks inadequate response capability if the child's condition changes en route. Delaying transport indefinitely until the child is entirely free of medical needs is not realistic or appropriate for a critically ill child who may need care only available at the receiving tertiary center. Prioritizing speed alone without regard to ongoing physiologic stability during transit ignores the real risk of deterioration during transport if appropriate monitoring and intervention capability are not maintained.

164. D. Safe transitions from hospital to outpatient care require timely, detailed communication with the primary care provider, including the hospital course, new medications, any pending results, and specific follow-up needs, since the PCP plays a central role in ongoing care and needs this information to appropriately manage the child going forward. Relying solely on the family to relay complex clinical information, without direct communication to the PCP, risks incomplete or inaccurate information transfer. Sending only a name and discharge date omits essential clinical information the PCP needs for continuity of care. Delaying the discharge summary for months undermines its usefulness, since the PCP may need this information promptly for near-term follow-up care. Assuming the PCP does not need to know about pending results at discharge risks those results being missed or not properly followed up on, which is a recognized patient safety concern at hospital discharge.

165. B. Testing a single, small-scale change (structured form, one team, one week) with a plan to study results before wider rollout is the defining structure of a PDSA cycle, the core iterative method of quality improvement. It is not a randomized controlled trial, which requires random allocation to intervention and control groups and is a research design rather than a QI test of change. It is not a retrospective cohort study, which involves looking backward at existing data rather than prospectively testing a new process. It is not a cross-sectional survey, which would measure attitudes at a single point in time rather than test a process change. It is not a case-control study, which starts by identifying patients with and without an outcome and looking backward for exposures, not appropriate for testing a prospective process change.

166. A. I-PASS (Illness severity, Patient summary, Action list, Situation awareness/contingency planning, Synthesis by receiver) is a mnemonic-based structured handoff tool shown in multi-site studies to reduce medical errors and adverse events by standardizing what information is communicated at transitions of care, reducing the chance that critical information is omitted. It does not eliminate verbal handoff; it structures it. It does not shift all responsibility onto the incoming provider alone, since safe

handoffs are a shared responsibility between outgoing and incoming providers. It does not replace written sign-out with verbal-only communication; I-PASS includes both a structured verbal component and a written document. Its primary goal is error reduction through structured, complete communication, not shortening handoff time, though efficient standardized communication may be a secondary benefit.

167. A. Root cause analysis (RCA) is a structured, multidisciplinary, retrospective method used after a sentinel or serious safety event to identify the underlying system and process factors that contributed to the error, with the goal of preventing recurrence rather than assigning individual blame. Peer review is a distinct process focused on evaluating an individual clinician's competence or conduct. Morbidity and mortality conference is primarily an educational forum for case-based discussion and may inform but is not the same structured systems-analysis process as RCA. Incident reporting is the mechanism by which the event is first documented and flagged for review, not the systematic analysis itself. Disciplinary review focuses on individual consequences, which is contrary to the systems-focused, non-punitive intent of root cause analysis.

168. E. A just culture framework distinguishes between simple human error (which should prompt system-level learning and support), at-risk behavior (which should prompt coaching), and reckless behavior (which may warrant disciplinary action), balancing organizational learning with individual accountability. It is not a blame-free culture, which would fail to hold anyone accountable even for reckless or intentional unsafe acts. It is not a punitive culture, which would discourage honest reporting by treating all errors the same regardless of circumstances. It is not an autonomous culture, since just culture explicitly relies on system-level review and organizational response rather than leaving error correction solely to the individual. It is not a hierarchical culture, since just culture principles apply to reporting and accountability across all staff levels.

169. C. Standardized order sets, built from evidence-based guidelines, reduce unwarranted variation in care and decrease the risk of errors of omission (forgetting a necessary order) or commission (an inappropriate order) that are more likely with individualized free-text ordering, making this primarily a patient safety and quality intervention. While standardization can have secondary effects on cost, that is not the primary safety rationale. Order sets do not eliminate clinical judgment; they still allow for individualization when a patient's presentation warrants deviation from the standard pathway. They are not designed primarily for billing or coding purposes. While they may improve efficiency, the primary rationale specific to patient safety is the reduction of error-prone variation, not documentation time alone.

170. D. Care bundles combine several individually evidence-based practices into a single checklist-driven package, with the goal of improving reliable, consistent adherence to all components together, which has been shown to reduce CLABSI rates more effectively than inconsistent application of individual measures. No single bundle component alone is considered sufficient to prevent essentially all infections; the bundle's power comes from combined, reliable adherence. While reducing unnecessary line-days (via daily necessity review) is one bundle component, the bundle's primary mechanism is not simply reducing the number of lines placed independent of technique. Bundle effectiveness depends

heavily on consistent staff adherence at the bedside, not catheter material as the primary driver. Responsibility for adherence remains with bedside staff performing insertion and maintenance, not solely with the infection control department.

171. C. Anchoring bias is a well-described cognitive bias in diagnostic reasoning in which a clinician latches onto an initial diagnostic impression and does not sufficiently revise that impression as new or conflicting clinical information emerges, contributing to diagnostic error even when the clinician has adequate knowledge to reach the correct diagnosis. This scenario is not best explained by a pure knowledge deficit, since the issue was failure to reconsider rather than lack of awareness that the alternative diagnosis existed. It does not describe a system-level equipment failure, since the error arose from clinical reasoning rather than device malfunction. It does not describe a communication failure between teams, since the scenario describes a single clinician's reasoning process. It is unrelated to medication administration, since no medication error is described.

172. A. Formal medication reconciliation is a recognized patient safety practice because transitions of care (admission, internal transfer, and discharge) are high-risk points for unintentional medication discrepancies, and systematic comparison of medication lists at each of these transitions reduces adverse drug events caused by omissions, duplications, or dosing errors. It is not primarily a cost-reduction or staffing intervention. It does not eliminate the need for ongoing outpatient medication review; the primary care provider and family still need to remain vigilant after discharge. It is not primarily driven by insurance prior-authorization requirements. Its safety benefit applies at admission and internal transfer, not only at discharge, since discrepancies can be introduced or missed at any transition point.

173. D. Bronchiolitis is a clinical diagnosis, and published high-value care guidance (including Choosing Wisely and AAP bronchiolitis guidelines) recommends against routine chest radiography in typical, uncomplicated bronchiolitis, since radiographic findings such as atelectasis are commonly misinterpreted as pneumonia, leading to unnecessary antibiotic exposure without improving outcomes. It is not true that a radiograph should be obtained routinely to 'confirm' the diagnosis, since that runs counter to the evidence base. There is no regulatory requirement mandating chest radiography for all pediatric admissions. The guidance is not an absolute prohibition; radiography may still be appropriate in atypical, severe, or diagnostically uncertain presentations, so 'under all circumstances' is too absolute. Imaging decisions should be driven by clinical indication rather than being ordered primarily for reassurance.

174. D. High-value care guidance recommends against continuous pulse oximetry monitoring in clinically stable bronchiolitis patients who are no longer requiring supplemental oxygen, since transient, clinically insignificant desaturations detected by continuous monitoring can prompt unnecessary interventions and prolong hospital length of stay without improving outcomes; intermittent spot-checks are appropriate once a child is stable. It is not appropriate to maintain continuous monitoring regardless of clinical trajectory, since that is precisely the low-value practice this guidance addresses. It would not be appropriate to discontinue continuous monitoring immediately on admission for patients still requiring supplemental oxygen, since continuous monitoring remains appropriate while a child is

unstable or oxygen-dependent. The decision should be driven by clinical status, not parental preference alone, though family communication is still important. Continuous monitoring does have an appropriate role earlier in the clinical course when a child is unstable or hypoxemic.

175. B. High-value, evidence-based inpatient care emphasizes that laboratory testing should be ordered to answer a specific clinical question and guide management, and 'reflexive' or habit-based daily testing without such an indication exposes patients to unnecessary blood draws, discomfort, cost, and potential incidental findings that prompt further unnecessary workup, without improving outcomes. It is not true that more data is always beneficial; unindicated testing has real costs and potential harms. Eliminating laboratory testing entirely regardless of indication is also inappropriate, since testing is clearly indicated when there is a specific clinical question. This is a medical decision that should be addressed by the ordering medical team, not left solely to nursing staff. Continuing an established habit purely to avoid the appearance of reduced monitoring, without clinical justification, is not an evidence-based rationale for ordering.

176. C. Evidence-based, high-value pediatric care supports shorter antibiotic courses for uncomplicated community-acquired pneumonia in appropriately selected, clinically improving patients, since studies have shown shorter courses to be non-inferior to traditional longer courses while reducing antibiotic exposure, cost, and risk of resistance. Extending duration to a minimum of 14 days regardless of clinical response is not supported by current evidence and represents unnecessary antibiotic exposure. Stopping antibiotics after a single dose is inappropriate and would risk treatment failure, since a full short course, not a single dose, is the evidence-based approach. Antibiotic duration decisions should be guided by clinical evidence and patient response, not left entirely to preference without regard to data, and family preference alone should not override evidence-based dosing duration.

177. B. Number needed to treat (NNT) is an epidemiologic measure representing, on average, how many patients need to receive an intervention for one additional patient to benefit (here, to have one additional adverse outcome prevented) compared with the comparison group; an NNT of 20 means roughly 20 patients would need treatment for one additional prevented outcome. It does not mean the intervention prevents the outcome in exactly 20% of patients, which conflates NNT with absolute risk reduction in a way that is not directly equivalent, since NNT is calculated as 1 divided by the absolute risk reduction rather than being a simple percentage of successes. An NNT greater than 1 does not indicate the treatment is ineffective; nearly all effective treatments have an NNT greater than 1, and a lower NNT generally reflects a larger treatment effect, not a binary effective/ineffective cutoff. NNT does not imply a delay before the intervention 'begins working' in any individual patient. NNT describes benefit, not harm; the related but distinct concept for harm is number needed to harm (NNH).

178. C. A test with high sensitivity (98%) is effective for ruling out a condition when the result is negative, since few true cases are missed (a useful mnemonic is SnNOUT: high SeNsitivity, Negative result rules OUT), while a specificity of 70% indicates a meaningful false-positive rate, since 30% of patients without the condition would still test positive. Sensitivity and specificity do not have identical clinical implications; high sensitivity is most useful for ruling out disease when negative, while high

specificity is most useful for ruling in disease when positive (SpPIN). Given the relatively lower specificity in this scenario, a positive result should not be considered essentially diagnostic without further evaluation, since a substantial proportion of positives could be false positives. Specificity does not describe the proportion of all tested patients who will be positive; it specifically describes the proportion of patients without the disease who correctly test negative. Sensitivity and specificity are generally considered intrinsic properties of a test itself and are not directly determined by disease prevalence in the tested population, unlike predictive values, which do vary with prevalence.

179. C. Antimicrobial stewardship principles support de-escalating from broad-spectrum empiric therapy to the narrowest antibiotic effective against the identified pathogen once culture and susceptibility data are available and the patient is clinically improving, since this reduces the risks of antibiotic resistance, adverse effects, and disruption of the microbiome without compromising treatment efficacy. Continuing broad-spectrum therapy for the entire course despite susceptibility data showing a narrower option is effective represents unnecessary broad-spectrum exposure and runs counter to stewardship principles. Discontinuing all antibiotics immediately once culture results return, regardless of clinical status, is inappropriate if ongoing treatment is still indicated for the confirmed infection. Adding an additional broad-spectrum agent once a susceptible, narrow-spectrum option is identified is unnecessary and increases risk without added benefit. Culture and susceptibility results should inform antibiotic selection even when the patient is improving on the empiric regimen, since de-escalation while continuing appropriate treatment is the evidence-based approach, not an either/or with clinical improvement.

180. E. High-value care is defined as achieving comparable or better health outcomes at lower cost, so when two options are truly equivalent in effectiveness and tolerability, selecting the less expensive option is consistent with high-value, evidence-based practice and reduces unnecessary cost to the family and health system without compromising care. It is not appropriate to assume higher cost reflects higher quality when comparative effectiveness data show equivalence; cost and quality are not inherently linked. While cost is not the only consideration in clinical decision-making, high-value care explicitly incorporates cost as a relevant factor when clinical outcomes are equivalent, so 'never' considering cost is inconsistent with this framework. Choosing a treatment because it is more novel, without regard to comparative effectiveness or cost data, is not evidence-based. Selecting a treatment specifically to maximize hospital revenue conflicts with the patient-centered goals of high-value care.

181. A. A core principle of high-value, evidence-based care is that diagnostic testing should be ordered when the result is likely to meaningfully influence management, such as changing antibiotic use, isolation precautions, or discharge planning; ordering a test whose result will not change any of these represents low-value care, since it exposes the patient to unnecessary cost and potential discomfort without clinical benefit. It is not accurate to say viral panel testing should never be performed, since it can be clinically valuable when results would change isolation status, antibiotic decisions, or disposition in appropriate scenarios. Identifying a specific pathogen is not inherently valuable independent of clinical use; the value of a test lies in its impact on patient care. Ordering a clinically non-actionable test primarily to support future research, without clear clinical indication or informed consent processes

specific to research use, is not an appropriate justification in routine clinical care. There is a meaningful clinical distinction between testing that changes management and testing that does not, and accuracy of a test alone does not establish its clinical value in a given situation.

182. D. Rigorous evidence-based practice requires critically appraising a study's methodology, including its design (e.g., randomized versus observational), sample size, and potential sources of bias or confounding, before determining whether its internal validity supports adopting a practice change, since publication alone does not guarantee methodologic rigor or generalizability. Adopting a new practice immediately based solely on a study's conclusion, without appraising its methods, risks incorporating findings that may not be valid or applicable. Disregarding all single studies without reading them is also not appropriate, since well-designed individual studies can meaningfully inform practice, particularly when they add to or clarify existing evidence. Relying solely on journal reputation, without evaluating the specific study's methodology, is not sufficient critical appraisal. Relying only on the abstract, rather than reviewing the full methods and results, risks missing important methodologic limitations or nuances in the reported results.

183. B. Physician advocacy and leadership at the systems level involves recognizing recurring barriers to care, such as a pattern of transportation-related discharge delays, and raising them with hospital leadership or relevant committees to pursue systemic solutions (such as bedside medication delivery programs) that can prevent the problem for future patients, not just the current one. Addressing each occurrence only individually, without considering a systemic fix, misses an opportunity for meaningful systems-level improvement despite a clearly recurring pattern. Concluding that social barriers to care are entirely outside physician responsibility is inconsistent with the advocacy and leadership competencies expected of pediatric hospitalists, who are well positioned to identify and help address such systemic issues. Indefinitely delaying discharge without pursuing a systemic solution does not resolve the underlying barrier and is not a sustainable or appropriate response. Raising the issue only with the individual families, without engaging the hospital system that could implement a broader solution, does not address the recurring, systemic nature of the problem.

184. B. Effective leadership of an interdisciplinary quality initiative involves engaging relevant stakeholders across disciplines early in the design process, incorporating frontline perspective (from nursing, infection prevention, and physicians alike) to build shared ownership, which is associated with more successful and sustained implementation than a top-down approach. Designing the initiative unilaterally and only informing other disciplines after implementation has begun undermines buy-in and frontline input, both of which are important for sustained success. Excluding nursing input is inappropriate, since nursing plays a central role in catheter insertion and maintenance practices and their frontline perspective is essential to a successful initiative. Excluding infection prevention specialists is also inappropriate, since they have direct expertise and responsibility relevant to catheter-associated infection prevention. Focusing exclusively on physician-facing education, without addressing nursing workflows or infection prevention practices, would miss key components of a comprehensive, effective initiative given that all three groups have meaningful roles in catheter care.

185. C. A systems-level, advocacy-oriented approach to identifying a disparity in health outcomes begins with investigating potential underlying contributors, which may include barriers to outpatient follow-up, medication access, housing, or environmental exposures, done in partnership with relevant stakeholders (which may include community partners, primary care, and public health), before designing a targeted intervention informed by that understanding. It would not be appropriate to assume the disparity is solely due to individual family choices without investigating potential systemic contributors, since disparities in health outcomes are frequently influenced by structural and environmental factors beyond individual choice. Taking no action and assuming the disparity is unavoidable is inconsistent with the physician's role in advocacy for vulnerable populations. Addressing the issue only by extending inpatient length of stay, without addressing outpatient or environmental contributors, does not address the root causes driving readmission. While readmission rates do have financial implications, framing this purely as a billing and finance issue, with no role for systems-level clinical advocacy, misses the clinical and equity dimensions of the problem.

186. A. Community-level advocacy for hospitalized children with barriers to outpatient care involves partnering with community organizations and resources (such as local pharmacies, patient assistance programs, or community health workers) that can help bridge gaps like medication access after discharge, an approach consistent with the pediatric hospitalist's role in advocacy and leadership beyond the hospital walls. Concluding that this issue is entirely outside the hospital's influence overlooks the meaningful role hospitals and hospitalists can play in connecting families to community resources. Providing only verbal instructions without connecting the family to a resource that addresses the actual access barrier is unlikely to resolve the underlying problem. Indefinitely delaying discharge while the hospitalist alone attempts to personally resolve a community-level access barrier is not a sustainable or appropriate systems-level solution. Referring the issue solely to the family without offering any resource fails to leverage the hospital's potential role in connecting families to solutions.

187. B. Adolescent confidentiality protections vary by state and by the specific type of service involved (such as certain reproductive health, mental health, or substance use services), and appropriate practice involves honoring applicable confidentiality protections for those specific categories of care while still encouraging general family involvement and communication where appropriate and not legally restricted. It is not appropriate to disclose all information to a parent regardless of applicable protections, since this would violate legally protected confidentiality in jurisdictions and circumstances where such protections apply. Refusing to discuss any sensitive topic with an adolescent under any circumstances is also inappropriate and would prevent the adolescent from receiving legally protected confidential care. Confidentiality decisions should be grounded in applicable state law and institutional policy, not personal preference alone. It is inaccurate to assume no confidentiality protections exist for any hospitalized minor, since specific protections do apply in many jurisdictions for defined categories of care.

188. D. Pediatric ethical practice recognizes that, in addition to parental informed consent, children who are developmentally capable should be given the opportunity to provide assent, meaning their questions and concerns should be addressed in age-appropriate language, and their affirmative agreement (to the

extent developmentally possible) should be sought before proceeding with non-emergent procedures. Proceeding based on parental consent alone, without addressing the child's expressed reluctance and questions, does not meet the standard of seeking developmentally appropriate assent. Permanently canceling the procedure based solely on initial reluctance, without further age-appropriate discussion aimed at addressing the child's concerns, may not be necessary if concerns can be appropriately addressed and assent obtained. Sedating the child specifically to avoid the assent conversation circumvents rather than fulfills the ethical obligation to address the child's concerns. Making the medical decision based solely on the child's preference, overriding appropriate parental consent for a procedure that is not solely within the child's decisional authority, is also not the correct approach; assent supplements but does not replace parental consent for a 10-year-old.

189. B. Ethically appropriate care for a child with a serious, life-limiting condition and a poor likelihood of benefit from further escalation involves a goals-of-care conversation that honestly shares prognostic information, explores the family's values and priorities, and collaboratively discusses the full range of care options, including palliative approaches, as part of shared decision-making. Withholding prognostic information entirely is inconsistent with the ethical principles of honesty and shared decision-making, and assumes harm without individualized discussion. Unilaterally withdrawing interventions without any family discussion does not respect the family's role in shared decision-making, except in specific circumstances defined by law or ethics consultation processes not described here. Continuing to escalate every intervention indefinitely without ever discussing goals of care, regardless of clinical picture, may not serve the patient's or family's best interests and forecloses important shared decision-making. While subspecialist and palliative care involvement is often valuable and appropriate, deferring the conversation entirely away from the primary hospitalist team, who know the patient's hospital course, is not the most appropriate general approach; primary team involvement remains important.

190. D. Physicians, including pediatric hospitalists, are mandated reporters under law in all U.S. states, meaning they are legally obligated to report reasonable suspicion of child abuse or neglect to the appropriate child protective services or law enforcement agency; the legal threshold is reasonable suspicion, not certainty. Requiring full certainty before reporting is not the correct legal standard and would inappropriately raise the threshold beyond what mandated reporter laws require. The decision to report suspected abuse is a legal obligation of the mandated reporter and is not left to family preference regarding whether to involve child protective services. Addressing a reasonable suspicion of abuse only through informal counseling of the family, without formal reporting, does not fulfill the mandated reporting obligation and could leave a child at continued risk. Mandated reporter laws apply broadly to healthcare providers, including physicians, not solely to social workers.

191. D. The one-minute preceptor model is a structured, evidence-based microskills approach to efficient bedside teaching that includes getting a commitment from the learner, probing for supporting evidence, reinforcing what was done well, correcting errors, and teaching a generalizable takeaway point, matching the approach described. This is not a purely didactic lecture format, since the resident is actively engaged and asked to commit to a plan and provide reasoning rather than passively receiving information. It is not a simulation-based exercise, since the scenario describes real-time bedside

rounding with an actual patient rather than a simulated case away from the bedside. It is not a formal written examination, since the interaction is a verbal, real-time teaching exchange rather than an assessment instrument. It is not unstructured, since the scenario explicitly describes a defined sequence of teaching steps.

192. B. Effective feedback in medical education is most useful when it is specific, timely (delivered close to the observed event rather than delayed), and focused on specific, observable behavior along with a concrete suggestion for improvement, which allows the learner to connect the feedback to the actual event and make a meaningful change going forward. Waiting until a delayed end-of-rotation evaluation to first raise a specific, timely concern reduces the effectiveness of the feedback, since the specific context may be lost and the resident loses the opportunity for more immediate improvement. Vague, general praise without specific behavioral detail does not give the learner actionable information for improvement. Delivering feedback about a performance gap publicly, especially in front of a patient's family, is not appropriate and can be harmful to the learner and potentially to the educational and clinical environment; feedback about performance gaps is generally best delivered privately. Effective feedback focuses on specific, observable behavior rather than a resident's perceived personal characteristics, which is more likely to be received constructively and to support behavior change.

193. D. Adult learning theory (andragogy) emphasizes that adult learners are often self-directed, identifying their own learning needs and taking initiative to address them, frequently motivated by relevance to a specific, practical problem they have encountered, which matches the resident's behavior of independently identifying a knowledge gap and seeking out relevant literature. This is not passive knowledge acquisition, since the resident took independent initiative rather than depending entirely on a teacher to identify and address the gap. It is not rote memorization, since the learning was directly connected to and motivated by a practical clinical case rather than being disconnected from context. It is not simulation-based learning, since the scenario describes independent literature review rather than a structured simulated clinical environment. It is not assessment-driven learning, since the resident's stated motivation was to improve care for a future similar patient, not to prepare for a scheduled examination.

194. B. Competency-based assessment using milestones and entrustable professional activities provides more specific, criterion-based descriptions of the skills and behaviors expected at defined developmental stages, compared with global subjective ratings, allowing for more objective and actionable assessment of a resident's progression, more targeted feedback, and more individualized educational planning. Milestones and EPAs are not primarily intended to reduce the length of residency training; they are an assessment framework, not a duration-modification tool. They do not eliminate the need for direct faculty observation; robust, meaningful assessment using this framework still depends on direct observation of trainee performance. While milestones data may be used in board certification-related program reporting, they also serve an ongoing, formative role in day-to-day feedback and individualized educational planning, not solely a summative certification-eligibility function. They are intended to structure and inform, not replace, supervising faculty's clinical judgment in assessing trainees.

195. A. The central methodologic advantage of randomization is that it tends to balance both known and unknown confounding variables between the intervention and comparison groups, which strengthens the ability to attribute differences in outcome to the intervention itself rather than to pre-existing differences between groups, improving internal validity and the ability to infer causality, compared with observational designs where confounding is a major limitation. Randomized trials are not inherently advantageous because they require a smaller sample size; required sample size depends on the expected effect size and study parameters, not study design category alone. Randomized trials still require rigorous statistical analysis of the resulting data; randomization does not eliminate this need. Randomized trials are not inherently faster to complete than observational cohort studies; in many cases, they take longer due to enrollment, consent, and follow-up requirements. The primary advantage of randomization relates specifically to strengthening internal validity and causal inference through confounding control, not general administrative ease.

196. C. In the traditional hierarchy of evidence used in evidence-based medicine, well-conducted systematic reviews and meta-analyses of multiple randomized controlled trials are generally considered to represent the highest level of evidence, ranked above a single randomized controlled trial, because they synthesize data across multiple studies, which can increase precision and generalizability when the included trials are of good quality and appropriately combined. It is not accurate that a systematic review and meta-analysis is considered lower-level evidence than an individual case report, since case reports are generally considered among the lowest levels of evidence in the traditional hierarchy. It is not equivalent to expert opinion alone; expert opinion, absent supporting data, is generally considered lower on the evidence hierarchy than a well-conducted systematic review of randomized trials. The evidence hierarchy does explicitly distinguish between different study designs, ranking them by their relative strength for establishing causality and minimizing bias. It is also not accurate that a systematic review and meta-analysis of randomized trials is lower-level evidence than a single small observational cohort study, since observational cohort studies are generally ranked lower than well-conducted randomized trial evidence, including meta-analyses of such trials.

197. A. A key distinguishing factor between quality improvement and human subjects research is intent: QI projects are generally intended to improve local processes and outcomes using existing, already-established evidence-based practices, with data used for internal improvement purposes and no intent to generate new generalizable knowledge for broader dissemination, whereas research is intended to test a hypothesis and generate generalizable knowledge, which typically requires IRB oversight. Classification as QI is not based simply on who is conducting the project (clinical staff versus a research team); the intent and design of the project are the relevant factors, and clinical staff can and do conduct formal human subjects research as well as QI. Classification is not automatically human subjects research simply because any patient-related data is collected; QI projects routinely use patient-related data for internal improvement purposes without constituting research. Classification is not based solely on whether hospitalized patients are involved, since QI and research can both involve hospitalized patients; the intent and generalizability of the project are the distinguishing features. It is not accurate that IRB review is never required for a project internally labeled as QI; if a project's actual design and intent meet

the definition of human subjects research (such as testing a novel, unproven intervention with the intent to generate generalizable knowledge), IRB review may still be required regardless of the internal label applied to it.

198. C. Before enrolling human subjects, including hospitalized pediatric patients, in a research study, the protocol must undergo IRB review and approval, and pediatric research is subject to additional specific regulatory protections given the vulnerability of children as a research population, reflecting the ethical principle of protecting vulnerable subjects. It is not accurate that IRB review is unnecessary simply because investigators believe the intervention is safe; IRB review itself is the required, independent mechanism for evaluating safety, risk-benefit balance, and ethical conduct of the study, and cannot be bypassed based on investigator belief alone. Parental permission and, when developmentally appropriate, child assent are separate and additional required protections for pediatric research participants; IRB approval of the overall protocol does not eliminate the need for these individual-level consent and assent processes. IRB review requirements are not limited to studies involving experimental medications; they apply broadly to human subjects research involving novel interventions or protocols, including non-pharmacologic interventions. IRB review and approval must occur before enrollment begins, not retroactively after enrollment or before publication; retrospective approval after subjects have already been enrolled does not meet the ethical and regulatory requirement for prospective review.

199. E. A p-value of 0.03 means that, assuming the null hypothesis of no true difference between treatments is true, there is a 3% probability of observing a difference at least as large as the one seen due to chance alone; since this falls below the pre-specified alpha of 0.05, the result is conventionally considered statistically significant. It is not accurate to interpret the p-value as directly indicating a 97% probability that the observed difference reflects a true effect; this reflects a common misinterpretation, since the p-value is calculated under the assumption that the null hypothesis is true and does not directly quantify the probability that the alternative hypothesis is true. Statistical significance does not guarantee clinical significance; a statistically significant difference can still be too small in magnitude to be clinically meaningful, particularly with large sample sizes, so clinical importance must be assessed separately, often by examining the effect size and confidence interval. The p-value does not represent the probability that the null hypothesis itself is true given the data; this is a common but incorrect interpretation of what a p-value measures. Even when a result is statistically significant, careful consideration of the study's overall methodology, sample size, effect size, and confidence intervals remains necessary for full and accurate interpretation, rather than relying on the p-value threshold alone.

200. A. A well-constructed SMART aim statement is specific (defining the target population and process), measurable (specifying a quantifiable outcome), achievable (a realistic target), relevant (tied to a meaningful clinical or safety goal), and time-bound (specifying a timeframe), which the correct answer satisfies by specifying the population (stable bronchiolitis patients not requiring supplemental oxygen), the measurable target (30% reduction in duration of continuous monitoring), and the timeframe (6 months). "Improve pulse oximetry practices on the unit" is too vague, lacking a specific population, measurable target, or timeframe, making it difficult to know when the aim has been achieved. "Eliminate all use of pulse oximetry monitoring for every hospitalized patient regardless of clinical

status" is not an appropriate or achievable clinical aim, since continuous monitoring remains appropriate for unstable or oxygen-dependent patients, and the statement also lacks a timeframe. "Make staff more aware of high-value care principles in general" is not specific or measurable with respect to a defined clinical process or outcome. An aim targeting a theoretically ideal, zero-error process with no further measurement or reassessment is not achievable or realistic and is inconsistent with the iterative, ongoing measurement that characterizes sound quality improvement methodology.