

COMPREHENSIVE MOCK EXAM 4

Supplemental to: Pediatric Hospital Medicine Board Review 2026-2027

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*American Board of Pediatrics (ABP) Pediatric Hospital Medicine Certification
Examination — 200 questions, single-best-answer, domain-weighted per official ABP
PHM content outline*

Board-Review Questions

1. A 13-year-old obese girl presents with daily headaches and papilledema on fundoscopic exam, with a normal MRI brain and elevated opening pressure on lumbar puncture with normal CSF composition. Which of the following is the most likely diagnosis?

- A. Migraine with aura, which would not explain the papilledema or elevated opening pressure
- B. Bacterial meningitis, which would show an abnormal CSF cell count and chemistry
- C. A posterior fossa tumor, which would be expected to show an abnormality on MRI
- D. Cavernous sinus thrombosis, which would show a filling defect on MRI/MRV
- E. Idiopathic intracranial hypertension (pseudotumor cerebri)

2. A 6-year-old is noted to have six or more café-au-lait macules greater than 5 mm, axillary freckling, and multiple soft subcutaneous nodules along peripheral nerves. Which of the following is the most likely diagnosis?

- A. McCune-Albright syndrome, which presents with café-au-lait macules with different borders and endocrine findings rather than this specific combination
- B. Neurofibromatosis type 1, which best explains the full combination of findings described in this vignette
- C. Tuberous sclerosis, which presents with hypopigmented macules and different skin findings rather than café-au-lait macules
- D. Legius syndrome, which presents with café-au-lait macules but not neurofibromas
- E. Simple benign café-au-lait macules without an associated syndrome, which would not include the described nerve nodules

3. A 7-year-old presents with progressive urinary incontinence, a sacral dimple with an overlying hairy patch, and mild lower extremity weakness. MRI shows a low-lying conus medullaris with tethering. Which of the following is the most likely diagnosis?

- A. Transverse myelitis, which would present acutely rather than with this progressive congenital pattern
- B. Guillain-Barré syndrome, which would not explain the sacral dimple or MRI findings

C. Tethered cord syndrome (occult spinal dysraphism), the diagnosis most consistent with the clinical picture presented here

D. Simple nocturnal enuresis, which would not explain the weakness or MRI findings

E. Muscular dystrophy, which would not explain the specific sacral cutaneous marker or cord finding

4. An 18-month-old cries after being frustrated, briefly stops breathing, turns blue, and then has a brief loss of consciousness that resolves quickly on its own, with a normal neurologic exam and no postictal state. Which of the following is the most likely diagnosis?

A. A generalized seizure, which would typically be followed by a postictal period

B. Breath-holding spell of the pallid type, which is triggered by pain/startle rather than frustration and crying

C. Cardiac syncope from an arrhythmia, which would not typically be triggered specifically by crying after frustration

D. Cyanotic breath-holding spell, supported by the specific combination of findings in this case

E. Vasovagal syncope, which is uncommon at this young age and not typically triggered in this manner

5. A 15-year-old with a history of migraine develops sudden unilateral weakness and slurred speech during a severe headache, which resolves completely within an hour. Which of the following is the most appropriate approach?

A. Assume this is simply a typical migraine aura without any further evaluation, regardless of the specific findings — a reasonable differential consideration, though less consistent with the specific findings described here

B. Reassure the family based on the migraine history alone, without considering other diagnoses — a plausible alternative that the particular details in this vignette argue against

C. Evaluate for stroke and other secondary causes of focal deficits before attributing the episode to a migraine variant, given the significant overlap in presentation

D. Start prophylactic migraine medication without further workup — worth considering, but not the best fit given the constellation of findings presented

E. Discharge with headache diary instructions only, without any acute evaluation — a genuine competing possibility that remains less well supported by this presentation

6. A 10-year-old presents with fluctuating ptosis and diplopia that worsen with sustained upward gaze and improve with rest, along with mild fatigable limb weakness. Which of the following is the most likely diagnosis?

- A. Guillain-Barré syndrome, which would not typically show this fatigable, fluctuating pattern
- B. Botulism, which presents acutely rather than with this fluctuating, fatigable pattern
- C. Simple viral illness with incidental eye findings, which would not explain the fatigable pattern
- D. Migraine with ophthalmoplegia, which does not produce this specific fatigable pattern with sustained gaze
- E. Juvenile myasthenia gravis, the best-supported explanation given the findings described

7. A 6-year-old presents with morning headaches, vomiting, and a widened gait with truncal ataxia over several weeks. MRI shows a midline posterior fossa mass with obstructive hydrocephalus. Which of the following is the most likely diagnosis?

- A. Post-infectious cerebellar ataxia, which would not show a mass lesion on MRI
- B. Guillain-Barré syndrome, which would not explain the headache, vomiting, or MRI findings
- C. Simple viral gastroenteritis, which would not explain the ataxia or MRI findings
- D. Posterior fossa brain tumor (eg, medulloblastoma)
- E. Migraine with brainstem aura, which would not produce a mass lesion on MRI

8. A child in status epilepticus continues seizing despite an adequate benzodiazepine dose and a subsequent second-line antiepileptic load. Which of the following is the most appropriate next step?

- A. Repeat the same benzodiazepine dose a third time without escalating further — a consideration that does not fully account for all of the findings described
- B. Observe without further intervention since two agents have already been given — clinically plausible in isolation, but this case's specific findings point elsewhere

C. Discharge planning discussion, since ongoing seizure activity at this point is not an emergency — a reasonable differential consideration, though less consistent with the specific findings described here

D. Obtain outpatient EEG only, without further acute intervention — a plausible alternative that the particular details in this vignette argue against

E. Escalate to refractory status epilepticus management, including consideration of a continuous infusion antiepileptic agent and ICU-level care

9. A 4-year-old presents with a tender, fluctuant swelling anterior to the sternocleidomastoid muscle along its anterior border, with intermittent drainage, that has become acutely infected. Which of the following is the most likely diagnosis?

A. Thyroglossal duct cyst, which is typically midline rather than located along the anterior sternocleidomastoid border

B. Cystic hygroma, which typically presents as a larger, softer, compressible mass rather than this pattern

C. Reactive lymphadenitis alone, which would not typically show a history of intermittent drainage from a discrete tract

D. Infected branchial cleft cyst, which best explains the full combination of findings described in this vignette

E. Simple sebaceous cyst, which would not typically show this specific anatomic location and drainage pattern

10. A 5-year-old presents with a midline neck swelling that moves upward with tongue protrusion, which has become acutely tender, red, and swollen with fever. Which of the following is the most likely diagnosis?

A. Infected thyroglossal duct cyst, the diagnosis most consistent with the clinical picture presented here

B. Infected branchial cleft cyst, which is typically lateral rather than midline and does not move with tongue protrusion

C. Simple reactive cervical lymphadenitis, which would not move with tongue protrusion

D. Dermoid cyst, which does not characteristically move with tongue protrusion in this way

E. Ectopic thyroid tissue alone without cyst formation, which would not typically present acutely with these infectious signs

11. A 6-year-old presents with recurrent anterior epistaxis, currently actively bleeding from the right nostril, with no signs of hemodynamic instability. Which of the following is the most appropriate initial management?

- A.** Immediate posterior nasal packing as the first-line intervention for anterior bleeding
- B.** Tilt the head back and apply ice to the forehead as the primary intervention
- C.** Immediate surgical cauterization without first attempting simple measures
- D.** Direct firm pressure on the nasal ala for several minutes with the head tilted slightly forward
- E.** Immediate transfusion regardless of the degree of blood loss

12. A 3-year-old presents with unilateral ear pain and decreased hearing, and otoscopic exam reveals an object lodged in the ear canal. Which of the following is most important to consider before attempting removal?

- A.** The type of object (eg, button battery versus an inert object) and its position, since some objects (like batteries) require urgent removal while others allow a more measured approach
- B.** No specific considerations are needed since all ear foreign bodies are removed identically — worth considering, but not the best fit given the constellation of findings presented
- C.** The object should always be irrigated out regardless of its identity — a genuine competing possibility that remains less well supported by this presentation
- D.** Removal should always be delayed for at least 48 hours regardless of the object type — a consideration that does not fully account for all of the findings described
- E.** Sedation is required for every ear foreign body removal regardless of cooperation or object type — clinically plausible in isolation, but this case's specific findings point elsewhere

13. A 9-year-old presents with fever, trismus, and swelling extending from the angle of the jaw down the lateral neck, with imaging showing a deep space fluid collection lateral to the pharynx. Which of the following is the most likely diagnosis?

- A.** Peritonsillar abscess, which is more anterior and does not extend along the lateral neck in this pattern

- B.** Simple cervical lymphadenitis without a deep space abscess, which would not show this fluid collection on imaging
- C.** Mumps parotitis, which presents with parotid gland swelling rather than a deep neck space collection
- D.** Ludwig angina, which involves the floor of the mouth and submandibular space rather than this lateral neck location
- E.** Parapharyngeal abscess, supported by the specific combination of findings in this case

14. A 5-year-old with acute otitis media develops new unilateral facial droop with inability to close the eye on the affected side. Which of the following is the most likely explanation?

- A.** Facial nerve palsy as a complication of the acute otitis media
- B.** A simple viral illness unrelated to the ear infection, which would not explain this specific temporal association
- C.** Bell palsy that happens to coincide with the ear infection by chance, without any causal relationship
- D.** Normal variation in facial symmetry, which would not explain a new, acute facial droop
- E.** Migraine presenting with facial weakness, which does not typically cause this specific finding pattern

15. A 4-year-old presents with chronic unilateral ear drainage and conductive hearing loss. Otoscopic exam shows a whitish mass behind an intact tympanic membrane. Which of the following is the most likely diagnosis?

- A.** Simple otitis externa, which would not produce a mass behind an intact tympanic membrane
- B.** Acute otitis media alone, which would not typically show this specific whitish mass finding
- C.** Cholesteatoma, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette
- D.** Tympanosclerosis alone, which does not typically present as a mass causing conductive hearing loss in this way
- E.** A simple foreign body in the canal, which would be visible in the canal rather than behind the tympanic membrane

16. A 7-year-old has had seven documented episodes of culture-confirmed streptococcal tonsillitis in the past year, each requiring antibiotics, with significant school absence. Which of the following is the most appropriate next step?

- A.** Continue antibiotics for each future episode indefinitely, without considering any other option — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** No further action is warranted regardless of the frequency of documented episodes — a plausible alternative that the particular details in this vignette argue against
- C.** Immediate tonsillectomy without confirming the frequency or severity of episodes — worth considering, but not the best fit given the constellation of findings presented
- D.** Prophylactic daily antibiotics as the preferred long-term solution over any surgical option — a genuine competing possibility that remains less well supported by this presentation
- E.** Consider referral for tonsillectomy evaluation, given the frequency and documented nature of the episodes meeting criteria commonly used to guide this recommendation

17. A 5-year-old presents with chronic cough, recurrent sinopulmonary infections, and situs inversus on chest radiograph. Which of the following is the most likely diagnosis?

- A.** Cystic fibrosis, which does not typically include situs inversus as part of its presentation
- B.** Simple recurrent viral infections, which would not explain the situs inversus finding
- C.** Primary ciliary dyskinesia, the diagnosis most consistent with the clinical picture presented here
- D.** Asthma alone, which would not explain the situs inversus or the pattern of recurrent sinopulmonary infections
- E.** Immunodeficiency alone, which would not specifically explain the situs inversus finding

18. A newborn develops a large pleural effusion, and thoracentesis reveals milky fluid with a high triglyceride content once feeds are introduced. Which of the following is the most likely diagnosis?

- A.** Chylothorax, supported by the specific combination of findings in this case
- B.** Empyema, which would show purulent rather than milky, high-triglyceride fluid
- C.** Simple transudative effusion from heart failure, which would not show this specific high-triglyceride milky appearance

D. Hemothorax, which would show bloody rather than milky fluid

E. Malignant effusion, which is rare in a newborn and would not typically show this specific fluid characteristic

19. A 6-month-old has recurrent episodes of expiratory stridor and barking cough that worsen with crying or feeding and improve with positive airway pressure, without a clear infectious trigger. Bronchoscopy shows dynamic airway collapse during expiration. Which of the following is the most likely diagnosis?

A. Laryngomalacia, which causes inspiratory rather than primarily expiratory findings and involves the larynx rather than the trachea/bronchi

B. Vascular ring, which would show a fixed rather than dynamic pattern of airway compromise

C. Tracheomalacia, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette

D. Subglottic stenosis, which would show a fixed narrowing rather than dynamic collapse on bronchoscopy

E. Foreign body aspiration, which would not explain this chronic pattern without a clear inciting event

20. A 6-year-old presents with loud snoring, witnessed pauses in breathing during sleep, and daytime behavioral issues, with large tonsils noted on exam. Which of the following is the most appropriate next step?

A. Reassurance that snoring is a normal childhood finding requiring no further evaluation

B. Start a stimulant medication for the behavioral symptoms without addressing the sleep findings

C. Antihistamines as the primary treatment for the sleep-related symptoms

D. Weight loss counseling alone as the sole intervention regardless of tonsillar size

E. Referral for a sleep study and consideration of adenotonsillectomy given symptoms suggestive of obstructive sleep apnea

21. A 10-year-old living on a farm with significant exposure to moldy hay develops recurrent episodes of cough, fever, and dyspnea several hours after exposure, with chest imaging showing diffuse ground-glass opacities that improve with avoidance of the exposure. Which of the following is the most likely diagnosis?

- A.** Hypersensitivity pneumonitis, the diagnosis most consistent with the clinical picture presented here
- B.** Simple viral pneumonia, which would not show this specific pattern tied to a recurring environmental exposure
- C.** Asthma alone, which would not explain the specific imaging findings or exposure-related timing described
- D.** Bacterial pneumonia, which would not typically show this recurrent, exposure-triggered pattern
- E.** Pulmonary embolism, which would not explain the exposure-related timing or imaging pattern described

22. A 15-year-old athlete presents with episodic shortness of breath and a sensation of throat tightness during intense exercise that resolves quickly with rest, with normal spirometry between episodes and no response to albuterol during episodes. Which of the following is the most likely diagnosis?

- A.** Exercise-induced asthma, which typically shows some response to albuterol and different spirometry findings during episodes
- B.** Cardiac arrhythmia, which would not typically produce this specific throat-tightness symptom pattern
- C.** Simple deconditioning, which would not explain the specific throat tightness or episodic nature described
- D.** Vocal cord dysfunction (paradoxical vocal fold motion), supported by the specific combination of findings in this case
- E.** Anaphylaxis, which would be expected to show additional systemic allergic features not described here

23. A newborn who required a difficult delivery with a brachial plexus injury is also noted to have persistent unilateral elevation of the diaphragm on chest radiograph and reduced diaphragmatic movement on ultrasound. Which of the following is the most likely diagnosis?

- A.** Phrenic nerve injury with diaphragmatic paralysis, the best-supported explanation given the findings described
- B.** Congenital diaphragmatic hernia, which would show bowel loops in the chest rather than simple elevation with reduced movement

- C. Simple atelectasis, which would not explain the reduced diaphragmatic movement on ultrasound
- D. Pneumothorax, which would show a lucent pleural space rather than diaphragmatic elevation
- E. Transient tachypnea of the newborn, which would not explain the diaphragmatic findings described

24. A 2-year-old with severe croup has persistent stridor at rest, significant retractions, and a decreasing level of alertness despite repeated racemic epinephrine and dexamethasone. Which of the following is the most appropriate next step?

- A. Administer an additional dose of dexamethasone alone and reassess in several hours
- B. Discharge home with close outpatient follow-up given prior treatment already given
- C. Continue racemic epinephrine alone without further escalation
- D. Prepare for advanced airway management (intubation) given signs of impending airway failure
- E. Obtain a lateral neck radiograph before any further intervention

25. A 4-year-old with a significant pectus excavatum deformity is noted to have decreased exercise tolerance and is being evaluated for possible surgical correction. Which of the following is most important to assess as part of this evaluation?

- A. Skin examination alone, without any cardiopulmonary assessment — a consideration that does not fully account for all of the findings described
- B. Growth parameters alone, without further cardiopulmonary evaluation — clinically plausible in isolation, but this case's specific findings point elsewhere
- C. No further evaluation is needed since pectus excavatum is always purely cosmetic — a reasonable differential consideration, though less consistent with the specific findings described here
- D. Family history of unrelated conditions, without direct cardiopulmonary assessment of this child — a plausible alternative that the particular details in this vignette argue against
- E. Cardiopulmonary evaluation (eg, echocardiogram, pulmonary function testing) to assess for functional impact of the chest wall deformity

26. A 3-year-old has had three episodes of pneumonia in the same lung segment over the past year. Which of the following is the most appropriate next step?

- A.** No further evaluation is needed since recurrent pneumonia in young children is always benign — worth considering, but not the best fit given the constellation of findings presented
- B.** Continue treating each episode with antibiotics alone, without further investigation into an underlying cause
- C.** Assume viral etiology for all episodes without further workup — a genuine competing possibility that remains less well supported by this presentation
- D.** Further evaluation for an underlying anatomic, functional, or immunologic cause given recurrent pneumonia in the same anatomic location
- E.** Immediate lobectomy without further diagnostic workup — a consideration that does not fully account for all of the findings described

27. A 7-year-old presents with fatigue and exercise intolerance. Echocardiogram shows normal ventricular wall thickness and normal systolic function but impaired diastolic filling with biatrial enlargement. Which of the following is the most likely diagnosis?

- A.** Dilated cardiomyopathy, which would show chamber dilation and reduced systolic function rather than this pattern
- B.** Hypertrophic cardiomyopathy, which would show increased wall thickness rather than normal thickness with this filling pattern
- C.** Restrictive cardiomyopathy, which best explains the full combination of findings described in this vignette
- D.** Myocarditis, which typically shows reduced systolic function rather than isolated diastolic impairment with normal wall thickness
- E.** Simple deconditioning, which would not explain the specific echocardiographic findings described

28. A 5-year-old is found incidentally to have a fixed, widely split second heart sound and a soft systolic ejection murmur at the upper left sternal border, with normal growth and no symptoms. Echocardiogram confirms a moderate-sized defect between the atria. Which of the following best describes the most appropriate management approach?

- A.** Emergent surgical closure within 24 hours regardless of symptoms — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** Elective evaluation and planned closure (surgical or catheter-based) on a non-urgent basis, given the asymptomatic presentation
- C.** No follow-up is needed since the child is currently asymptomatic — a reasonable differential consideration, though less consistent with the specific findings described here
- D.** Immediate initiation of diuretics as the primary management — a plausible alternative that the particular details in this vignette argue against
- E.** Prostaglandin E1 infusion to maintain ductal patency — worth considering, but not the best fit given the constellation of findings presented

29. A fetus is noted on prenatal ultrasound to have a persistently slow heart rate around 55 bpm, and the mother has a known autoimmune condition with anti-Ro/La antibodies. Which of the following is the most likely diagnosis?

- A.** Simple sinus bradycardia, which would not explain this persistently low rate in this clinical context
- B.** Supraventricular tachycardia, which would show a fast rather than slow heart rate
- C.** Congenital complete heart block related to maternal autoantibodies
- D.** Long QT syndrome, which presents with arrhythmia risk rather than this specific persistent bradycardia pattern
- E.** A structural cardiac defect alone, without a conduction abnormality, which would not explain this specific rate finding

30. A 2-week-old presents with poor feeding, tachypnea, and is found to have diminished femoral pulses compared to strong brachial pulses, with a blood pressure discrepancy between the upper and lower extremities. Which of the following is the most likely diagnosis?

- A.** Coarctation of the aorta, the diagnosis most consistent with the clinical picture presented here
- B.** Patent ductus arteriosus alone, which would not explain this specific pulse and blood pressure discrepancy pattern
- C.** Atrial septal defect, which would not explain this specific finding pattern

D. Pulmonary stenosis, which would not explain the differential pulses between upper and lower extremities

E. Tricuspid atresia, which would not specifically explain this pulse and blood pressure discrepancy pattern

31. A child develops muffled heart sounds, jugular venous distension, and hypotension that worsens with inspiration, with a large pericardial effusion on echocardiogram and evidence of chamber compression. Which of the following is the most appropriate immediate management?

A. IV fluids alone without any drainage procedure, regardless of hemodynamic status

B. Diuretics as the primary treatment for this presentation

C. Observation alone with serial echocardiograms before considering any intervention

D. Urgent pericardiocentesis given signs of cardiac tamponade

E. Beta-blocker therapy as the primary treatment for this presentation

32. A tall, thin 14-year-old with long fingers and joint hypermobility is found to have a dilated aortic root on echocardiogram, consistent with a diagnosis of Marfan syndrome. Which of the following is most important for ongoing management given this diagnosis?

A. Regular cardiology follow-up with serial echocardiographic monitoring of the aortic root, given the risk of progressive dilation and dissection

B. No cardiac follow-up is needed once the initial diagnosis is confirmed — a genuine competing possibility that remains less well supported by this presentation

C. Immediate prophylactic aortic surgery regardless of the current root diameter — a consideration that does not fully account for all of the findings described

D. Follow-up limited to annual physical exam alone, without imaging — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Cardiac monitoring is only necessary if the patient becomes symptomatic — a reasonable differential consideration, though less consistent with the specific findings described here

33. A 12-year-old is found to have a short PR interval and a slurred upstroke of the QRS complex (delta wave) on a routine ECG, and reports occasional episodes of palpitations. Which of the following is the most likely diagnosis?

- A.** Long QT syndrome, which shows a prolonged QT interval rather than this specific PR/QRS pattern
- B.** First-degree AV block, which shows a prolonged rather than short PR interval
- C.** Simple sinus arrhythmia, which would not explain the delta wave finding
- D.** Complete heart block, which would show a different, more severe ECG pattern than described
- E.** Wolff-Parkinson-White syndrome (ventricular pre-excitation)

34. A former 26-week preterm infant with severe bronchopulmonary dysplasia is found on echocardiogram to have elevated right ventricular pressure estimates and right ventricular hypertrophy. Which of the following is the most likely explanation?

- A.** Pulmonary hypertension secondary to chronic lung disease of prematurity, supported by the specific combination of findings in this case
- B.** A primary structural cardiac defect unrelated to the lung disease, which would not typically produce isolated right heart changes in this specific pattern
- C.** Left ventricular failure as the primary cause, which would not explain isolated right-sided findings
- D.** Simple physiologic right ventricular dominance expected at this age, which would not explain elevated pressure estimates
- E.** Anemia of prematurity as the sole explanation, which would not explain these specific echocardiographic findings

35. A 9-year-old boy with a history of atopic disease presents with chronic dysphagia and intermittent food impaction. Upper endoscopy shows esophageal rings and eosinophilic infiltration on biopsy, with normal pH probe results. Which of the following is the most likely diagnosis?

- A.** Gastroesophageal reflux disease alone, which would be expected to show an abnormal pH probe result
- B.** Eosinophilic esophagitis, the best-supported explanation given the findings described
- C.** Achalasia, which would show a different manometric pattern rather than eosinophilic infiltration on biopsy
- D.** Esophageal stricture from a prior caustic ingestion, without a clear history of such an exposure

E. Simple food allergy without esophageal involvement, which would not explain the biopsy findings

36. A 2-year-old is witnessed swallowing a coin and now has drooling and difficulty swallowing. Radiograph confirms a coin lodged in the esophagus. Which of the following is the most appropriate next step?

- A. Endoscopic removal, given symptoms and esophageal location, rather than watchful waiting
- B. Observation alone at home, since coins typically pass without issue regardless of symptoms
- C. Induce vomiting to dislodge the object
- D. Administer a laxative to promote passage through the esophagus
- E. Reassure and discharge with follow-up radiograph in one week

37. A 3-year-old ingests a liquid household cleaning product and now has oral burns and drooling. Which of the following is the most appropriate immediate management approach?

- A. Induce vomiting to remove the ingested substance — a plausible alternative that the particular details in this vignette argue against
- B. Administer activated charcoal to bind the ingested substance — worth considering, but not the best fit given the constellation of findings presented
- C. Give a neutralizing substance by mouth to counteract the ingestion — a genuine competing possibility that remains less well supported by this presentation
- D. Attempt to dilute with a large volume of water or milk immediately by mouth — a consideration that does not fully account for all of the findings described
- E. Avoid inducing vomiting or attempting neutralization, and pursue prompt evaluation (including consideration of endoscopy) given risk of esophageal injury

38. A 4-week-old infant has progressively worsening jaundice with dark urine and pale, acholic stools. Labs show a predominantly conjugated hyperbilirubinemia. Which of the following is the most appropriate next step?

- A. Reassurance that this is likely physiologic jaundice, without further evaluation — clinically plausible in isolation, but this case's specific findings point elsewhere

B. Phototherapy alone as the definitive treatment, without further diagnostic workup — a reasonable differential consideration, though less consistent with the specific findings described here

C. Prompt evaluation (including hepatobiliary imaging) for biliary atresia, given the time-sensitive nature of surgical treatment

D. Discontinuation of breastfeeding as the primary intervention — a plausible alternative that the particular details in this vignette argue against

E. Repeat bilirubin in two weeks with no other evaluation in the interim — worth considering, but not the best fit given the constellation of findings presented

39. An infant who underwent extensive small bowel resection for necrotizing enterocolitis now has chronic diarrhea and poor growth, requiring long-term parenteral nutrition. Which of the following best describes this condition?

A. Simple lactose intolerance, which would not explain the need for long-term parenteral nutrition

B. Short bowel syndrome (intestinal failure), which best explains the full combination of findings described in this vignette

C. Celiac disease, which is unrelated to a history of surgical bowel resection

D. Toddler's diarrhea, which would not explain the need for parenteral nutrition

E. Cystic fibrosis, which is not caused by prior bowel resection

40. A 6-year-old with known chronic liver disease and portal hypertension presents with sudden hematemesis and hemodynamic instability. Which of the following is the most likely source of bleeding, and what is the priority management?

A. Esophageal variceal bleeding, requiring hemodynamic resuscitation and urgent endoscopic evaluation/therapy

B. Simple peptic ulcer disease, which is unrelated to the portal hypertension and requires only acid suppression

C. Mallory-Weiss tear alone, which would not explain this degree of instability in this clinical context

D. Meckel diverticulum bleeding, which is unrelated to the underlying liver disease

E. Hemorrhoidal bleeding, which would not present as hematemesis

41. A 4-year-old with cystic fibrosis presents with recurrent rectal prolapse, particularly with straining during bowel movements. Which of the following best explains the association between these two conditions?

- A. This is a coincidental, unrelated finding with no connection to the underlying diagnosis
- B. Rectal prolapse is exclusively related to unrelated anatomic anomalies in this population
- C. This represents a manifestation of an unrelated primary constipation disorder only
- D. Malabsorption, chronic cough, and bulky stools related to cystic fibrosis contribute to increased straining and risk of rectal prolapse
- E. This is only explained by pancreatic enzyme overdose, unrelated to the underlying disease process

42. A 3-month-old presents with bright red blood streaking the surface of hard stools and pain with defecation, with a visible small linear tear on the posterior anal verge. Which of the following is the most likely diagnosis?

- A. Meckel diverticulum, which would present with painless bleeding rather than pain with defecation and a visible anal tear
- B. Anal fissure, the diagnosis most consistent with the clinical picture presented here, supported by the specific combination of findings in this case
- C. Intussusception, which would present with more severe, episodic pain and a different stool pattern
- D. Inflammatory bowel disease, which is uncommon at this age and would not typically present with an isolated visible fissure
- E. Hemorrhoids, which are uncommon in infants and would not explain the specific visible finding described

43. A 10-year-old presents with several months of recurrent upper abdominal discomfort and early satiety, without weight loss, GI bleeding, or other alarm features, and a normal upper endoscopy. Which of the following is the most likely diagnosis?

- A. Functional dyspepsia, the best-supported explanation given the findings described

- B.** Peptic ulcer disease, which would be expected to show endoscopic findings
- C.** Malignancy, which would be expected to show additional alarm features or endoscopic abnormalities
- D.** Celiac disease, which would be expected to show characteristic endoscopic or serologic findings
- E.** Pancreatitis, which would be expected to show elevated pancreatic enzymes

44. A 6-year-old with an unidentified ingestion develops jaundice, coagulopathy, and altered mental status over several days, with markedly elevated liver transaminases. Which of the following is the most appropriate immediate priority?

- A.** Discharge home with outpatient hepatology follow-up given the absence of a clear cause identified yet — a genuine competing possibility that remains less well supported by this presentation
- B.** Urgent supportive care and evaluation for the underlying cause (eg, acetaminophen level) with consideration of transfer to a center capable of liver transplantation, given concern for acute liver failure
- C.** Oral rehydration alone without further specific evaluation or intervention — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Antibiotics alone as the primary intervention without further diagnostic workup — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** Observation alone without further testing, given the nonspecific nature of these findings — a plausible alternative that the particular details in this vignette argue against

45. A 5-year-old with nephrotic syndrome from minimal change disease develops sudden unilateral leg swelling, pain, and warmth. Which of the following complication should be considered given the underlying diagnosis?

- A.** Venous thromboembolism, a recognized complication of the hypercoagulable state associated with nephrotic syndrome
- B.** Simple muscle strain unrelated to the underlying nephrotic syndrome
- C.** Cellulitis alone, without considering a vascular complication related to the underlying condition
- D.** A normal variant of nephrotic edema distribution, without further evaluation needed

E. Compartment syndrome from an unrelated traumatic injury

46. A 15-year-old after an extreme exertion event presents with dark, tea-colored urine, elevated creatine kinase, and rising creatinine. Which of the following is the most likely diagnosis and priority management?

A. Simple exercise-related dehydration, without further specific evaluation or treatment needed

B. Hemolytic anemia unrelated to muscle injury, which would not explain the elevated creatine kinase

C. Urinary tract infection, which would not explain this specific lab pattern

D. Rhabdomyolysis, requiring aggressive IV fluid hydration and monitoring for acute kidney injury and electrolyte abnormalities

E. Nephrolithiasis alone, which would not explain the elevated creatine kinase

47. A 3-year-old presents with failure to thrive, and labs show a normal anion gap metabolic acidosis with an inappropriately alkaline urine pH. Which of the following is the most likely diagnosis?

A. Diabetic ketoacidosis, which would show an elevated, not normal, anion gap

B. Lactic acidosis, which would show an elevated, not normal, anion gap

C. Simple diarrhea-related acidosis, which would be expected to show an appropriately acidic urine pH rather than this finding

D. Renal tubular acidosis, which best explains the full combination of findings described in this vignette

E. Salicylate toxicity, which would show a mixed acid-base picture with an elevated anion gap

48. A 2-year-old girl with a history of a febrile UTI is found on voiding cystourethrogram to have reflux of contrast into the ureters and renal pelvis during voiding. Which of the following is the most likely diagnosis?

A. Posterior urethral valves, which occur specifically in males and would not explain this finding in a female patient

B. Vesicoureteral reflux, the diagnosis most consistent with the clinical picture presented here

- C. Ureteropelvic junction obstruction, which would not show reflux of contrast on VCUG in this way
- D. Multicystic dysplastic kidney, which is a structural anomaly rather than a reflux-related finding
- E. Simple physiologic hydronephrosis, which would not explain this specific VCUG finding

49. A 14-year-old girl presents with recurrent cramping lower abdominal pain occurring with menses, without an identifiable structural abnormality on pelvic ultrasound. Which of the following is the most likely diagnosis?

- A. Ectopic pregnancy, which would not present as a recurrent cyclic pattern tied to typical menses
- B. Endometriosis, which would be expected to show additional findings or a different pain pattern beyond simple menstrual cramping
- C. Ovarian torsion, which presents acutely and severely rather than as recurrent cyclic pain
- D. Pelvic inflammatory disease, which would be expected to show additional signs of infection
- E. Primary dysmenorrhea, supported by the specific combination of findings in this case

50. A 14-year-old boy is noted on exam to have a soft, painless scrotal mass on the left side that increases in size with standing and the Valsalva maneuver, described as feeling like a 'bag of worms.' Which of the following is the most likely diagnosis?

- A. Testicular torsion, which presents acutely and painfully rather than as this chronic, painless finding
- B. Hydrocele, which would transilluminate and would not have this specific texture or positional change pattern
- C. Varicocele, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette
- D. Inguinal hernia, which would not have this specific 'bag of worms' texture
- E. Testicular tumor, which typically presents as a firm, solid mass rather than this specific texture and positional pattern

51. A newborn boy is noted on exam to have the urethral opening on the ventral surface of the penis rather than at the tip. Which of the following is the most appropriate management consideration?

- A.** Referral to pediatric urology, and importantly, avoiding routine circumcision until urologic evaluation given that the foreskin may be needed for later surgical repair
- B.** Immediate circumcision as the first step, regardless of the location of the urethral opening — worth considering, but not the best fit given the constellation of findings presented
- C.** No referral or specific management consideration needed, since this is a common benign variant requiring no follow-up — a genuine competing possibility that remains less well supported by this presentation
- D.** Emergent surgical repair within the first 24 hours of life in all cases — a consideration that does not fully account for all of the findings described
- E.** Reassurance that this always resolves spontaneously without any intervention — clinically plausible in isolation, but this case's specific findings point elsewhere

52. A newborn is found on prenatal ultrasound to have bilaterally enlarged, echogenic kidneys, and after birth develops hypertension and reduced renal function. Family history is negative for adult-onset kidney disease. Which of the following is the most likely diagnosis?

- A.** Autosomal recessive polycystic kidney disease, the diagnosis most consistent with the clinical picture presented here
- B.** Autosomal dominant polycystic kidney disease, which typically presents later in life and would be expected to show a positive family history
- C.** Multicystic dysplastic kidney, which is typically unilateral rather than bilateral
- D.** Simple bilateral hydronephrosis, which would not explain the hypertension or reduced renal function in this pattern
- E.** Wilms tumor, which presents as a discrete mass rather than bilateral enlarged echogenic kidneys at this age

53. A 6-year-old presents with limp, fever, and localized bone pain and tenderness over the distal femur, with elevated inflammatory markers and MRI showing a focal area of bone marrow edema and a subperiosteal fluid collection. Which of the following is the most likely diagnosis?

- A.** Transient synovitis, which would not explain the focal bone marrow edema or subperiosteal collection on MRI
- B.** A simple bone contusion, which would not explain the fever or elevated inflammatory markers

- C.** Ewing sarcoma, which would typically show a more aggressive, longer-standing pattern rather than this acute febrile presentation
- D.** Acute hematogenous osteomyelitis, supported by the specific combination of findings in this case
- E.** Juvenile idiopathic arthritis, which involves the joint rather than this focal bony/subperiosteal finding pattern

54. A 3-month-old girl born in breech presentation is noted on exam to have asymmetric hip abduction and a positive Ortolani/Barlow maneuver. Which of the following is the most appropriate next step?

- A.** Reassurance and no further evaluation, since hip exam findings are expected to resolve spontaneously in all infants
- B.** Referral for hip ultrasound and orthopedic evaluation given concern for developmental dysplasia of the hip
- C.** Immediate surgical hip reduction without further imaging confirmation
- D.** Reassess only at the routine well-child visit at one year of age
- E.** Begin ambulation-assistive bracing without any imaging confirmation first

55. A 9-year-old with a personal history of psoriasis develops swelling and pain in several fingers, with sausage-like swelling of the digits (dactylitis) and nail pitting. Which of the following is the most likely diagnosis?

- A.** Polyarticular juvenile idiopathic arthritis, which does not typically include dactylitis and nail pitting as characteristic features
- B.** Juvenile psoriatic arthritis, the best-supported explanation given the findings described
- C.** Reactive arthritis, which would not explain the nail pitting or personal psoriasis history
- D.** Gout, which is uncommon in children and would not explain this specific dactylitis and nail finding pattern
- E.** Septic arthritis, which would not typically involve this multi-digit dactylitis pattern with nail pitting

56. A 14-year-old girl presents with widespread musculoskeletal pain for several months, fatigue, sleep disturbance, and multiple tender points on exam, with normal inflammatory markers and a normal rheumatologic workup. Which of the following is the most likely diagnosis?

- A.** Juvenile fibromyalgia, which best explains the full combination of findings described in this vignette
- B.** Systemic lupus erythematosus, which would be expected to show an abnormal rheumatologic workup
- C.** Polyarticular juvenile idiopathic arthritis, which would be expected to show objective joint findings and possibly elevated inflammatory markers
- D.** Dermatomyositis, which would be expected to show characteristic skin findings and muscle weakness
- E.** Reactive arthritis, which would be expected to show a preceding infection and objective joint findings

57. An 8-year-old presents with recurrent painful oral ulcers, genital ulcers, and episodes of eye redness with uveitis. Which of the following is the most likely diagnosis?

- A.** Herpes simplex virus infection alone, which would not explain the genital ulcers and recurrent uveitis together in this pattern
- B.** Stevens-Johnson syndrome, which is an acute drug/infection-triggered process rather than this recurrent pattern
- C.** Behçet disease, the diagnosis most consistent with the clinical picture presented here, supported by the specific combination of findings in this case
- D.** Simple aphthous stomatitis alone, which would not explain the genital ulcers or uveitis
- E.** Reactive arthritis, which would not typically produce this specific combination of oral, genital, and ocular findings

58. A 12-year-old girl presents with Raynaud phenomenon, skin thickening of the fingers and face, and dysphagia, with positive anti-Scl-70 antibodies. Which of the following is the most likely diagnosis?

- A.** Localized morphea, which does not include Raynaud phenomenon or systemic organ involvement

- B.** Systemic lupus erythematosus, which does not typically present with this specific skin thickening and antibody pattern
- C.** Juvenile dermatomyositis, which would show a heliotrope rash and Gottron papules rather than this skin thickening pattern
- D.** Juvenile systemic sclerosis, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette
- E.** Mixed connective tissue disease, which is a less specific diagnosis than the pattern described with this specific antibody

59. An 8-year-old presents with recurrent episodes of bone pain and swelling, particularly at the clavicle, with imaging showing multifocal sterile bone lesions and negative cultures despite biopsy. Which of the following is the most likely diagnosis?

- A.** Acute hematogenous osteomyelitis, which would be expected to show a positive culture in most cases
- B.** Ewing sarcoma, which would not typically present as multifocal sterile lesions with this recurrent pattern
- C.** Chronic recurrent multifocal osteomyelitis (CRMO), the diagnosis most consistent with the clinical picture presented here
- D.** Leukemia with bony infiltration, which would be expected to show additional hematologic abnormalities
- E.** Simple growing pains, which would not explain the imaging findings described

60. A 13-year-old on long-term minocycline for acne develops joint pain, a malar-like rash, and a positive ANA and anti-histone antibody, with improvement after the medication is discontinued. Which of the following is the most likely diagnosis?

- A.** Idiopathic systemic lupus erythematosus, which would not be expected to resolve simply with discontinuation of a medication
- B.** Juvenile dermatomyositis, which would not explain this specific antibody pattern or medication association
- C.** Acne-related reactive skin changes alone, which would not explain the joint pain or positive autoantibodies

- D.** Serum sickness-like reaction, which does not typically include a positive anti-histone antibody
- E.** Drug-induced lupus, supported by the specific combination of findings in this case, the best-supported explanation given the findings described

61. A 14-year-old boy is shorter and has less pubertal development than his peers, with a bone age that is delayed relative to his chronological age, and a family history of a parent who was also a 'late bloomer.' Growth velocity is normal for bone age. Which of the following is the most likely diagnosis?

- A.** Growth hormone deficiency, which would be expected to show a reduced growth velocity rather than one appropriate for bone age
- B.** Turner syndrome, which occurs in females and would not explain this presentation in a boy
- C.** Hypothyroidism, which would be expected to show a reduced growth velocity and other associated findings
- D.** Constitutional delay of growth and puberty, which best explains the full combination of findings described in this vignette
- E.** Precocious puberty, which would present with early rather than delayed pubertal development

62. A 10-year-old girl presents with short stature, a webbed neck, and a wide-spaced nipple line, and is noted to have primary amenorrhea concerns for the future. Karyotype shows 45,X. Which of the following is the most likely diagnosis?

- A.** Noonan syndrome, which has overlapping features but a different underlying genetic cause than this karyotype
- B.** Turner syndrome, the diagnosis most consistent with the clinical picture presented here
- C.** Klinefelter syndrome, which occurs in males and would not explain this presentation or karyotype in a girl
- D.** Down syndrome, which has a different characteristic karyotype and phenotype than described
- E.** Marfan syndrome, which does not present with this karyotype or these specific physical findings

63. A 15-year-old boy presents with tall stature, gynecomastia, small testes, and learning difficulties. Karyotype shows 47,XXY. Which of the following is the most likely diagnosis?

- A.** Klinefelter syndrome, supported by the specific combination of findings in this case

- B.** Turner syndrome, which occurs in females and would not explain this karyotype or presentation in a boy
- C.** Marfan syndrome, which does not present with this specific karyotype
- D.** Fragile X syndrome, which has a different genetic basis and phenotype than described
- E.** Noonan syndrome, which has a different underlying genetic cause and phenotype than this karyotype

64. A 15-year-old with a strong multi-generational family history of diabetes diagnosed at a young age is found to have mild hyperglycemia, is not obese, and has negative islet autoantibodies with preserved C-peptide (endogenous insulin production). Which of the following is the most likely diagnosis?

- A.** Maturity-onset diabetes of the young (MODY), the best-supported explanation given the findings described
- B.** Type 1 diabetes mellitus, which would be expected to show positive islet autoantibodies and low C-peptide
- C.** Type 2 diabetes mellitus, which is more strongly associated with obesity and insulin resistance rather than this specific inheritance and antibody/C-peptide pattern
- D.** Cystic fibrosis-related diabetes, which would be expected to occur in the setting of known CF rather than this isolated presentation
- E.** Steroid-induced diabetes, which would require a history of corticosteroid exposure not described here

65. A newborn has recurrent, severe hypoglycemia requiring very high glucose infusion rates to maintain normal levels, with an inappropriately elevated insulin level at the time of a low glucose measurement. Which of the following is the most likely diagnosis?

- A.** Simple transient neonatal hypoglycemia, which would not require this degree of glucose infusion or show this inappropriate insulin elevation
- B.** Congenital adrenal hyperplasia, which would not explain this specific inappropriately elevated insulin finding
- C.** Growth hormone deficiency, which would not explain an inappropriately elevated insulin level at the time of hypoglycemia

D. Glycogen storage disease, which typically shows a different hormonal pattern and additional findings such as hepatomegaly

E. Congenital hyperinsulinism, which best explains the full combination of findings described in this vignette

66. A 12-year-old girl presents with fatigue, cold intolerance, and a firm, non-tender, diffusely enlarged thyroid gland. Labs show an elevated TSH, low free T4, and positive thyroid peroxidase antibodies. Which of the following is the most likely diagnosis?

A. Graves disease, which would show a suppressed rather than elevated TSH

B. Subacute thyroiditis, which is typically painful and self-limited rather than presenting with this chronic pattern and antibody profile

C. Simple iodine deficiency, which is uncommon in this setting and would not explain the positive antibody testing

D. Thyroid cancer, which would present as a nodule rather than diffuse goiter with this specific hormonal and antibody pattern

E. Hashimoto thyroiditis (autoimmune hypothyroidism), the diagnosis most consistent with the clinical picture presented here

67. An 8-year-old boy has a height significantly below the expected range for his age with a growth velocity below the normal range, normal proportions, and delayed bone age. Initial screening labs are otherwise unremarkable. Which of the following is the most appropriate next step?

A. Immediate initiation of growth hormone therapy without further diagnostic testing

B. Reassurance alone without further evaluation, since short stature is usually a benign familial variant

C. Referral to pediatric endocrinology for further evaluation, including consideration of growth hormone stimulation testing

D. No further workup is needed since bone age is already known to be delayed

E. Karyotype testing alone, without endocrinology referral or further hormonal evaluation

68. A newborn of a mother with poorly controlled Graves disease during pregnancy develops tachycardia, irritability, poor weight gain, and a goiter in the first days of life. Which of the following is the most likely diagnosis?

- A.** Neonatal (transient) hyperthyroidism from transplacental passage of maternal thyroid-stimulating antibodies
- B.** Neonatal abstinence syndrome, which is unrelated to maternal thyroid disease
- C.** Sepsis alone, which would not explain the specific combination of tachycardia, goiter, and maternal Graves history
- D.** Simple transient tachypnea of the newborn, which would not explain the goiter or irritability described
- E.** Congenital hypothyroidism, which would show the opposite pattern of low, not elevated, thyroid function

69. A hospitalist develops a reasonable suspicion that a child's injury may be the result of abuse. Which of the following best describes the hospitalist's legal obligation in this situation?

- A.** Mandated reporters are legally required to report reasonable suspicion of abuse to the appropriate child protective services or law enforcement agency, even without absolute certainty
- B.** Reporting is only required if the hospitalist is completely certain that abuse occurred — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** Reporting is optional and left entirely to the discretion of the treating physician — a plausible alternative that the particular details in this vignette argue against
- D.** Reporting obligations apply only to social workers, not physicians — worth considering, but not the best fit given the constellation of findings presented
- E.** The family's consent is required before a report can be made — a genuine competing possibility that remains less well supported by this presentation

70. A 6-week-old, pre-mobile infant is noted to have unexplained bruising on the trunk during a routine exam. Which of the following best reflects the appropriate approach to this finding?

- A.** Assume the bruising is from normal handling during care, since bruising is common in infants — a consideration that does not fully account for all of the findings described

B. No further evaluation is needed since the bruise is small — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here

C. Recognize that bruising in a pre-mobile infant is inherently concerning and warrants further evaluation for potential abuse, including consideration of an underlying bleeding disorder

D. Attribute the bruising solely to a vitamin deficiency without further evaluation — a plausible alternative that the particular details in this vignette argue against

E. Refer only for outpatient follow-up in one month without further acute evaluation — worth considering, but not the best fit given the constellation of findings presented

71. A 4-year-old is found wandering outside unsupervised near traffic for a prolonged period, and further history reveals a pattern of the child being left without appropriate adult supervision on multiple occasions. Which of the following best describes this situation?

A. This represents typical age-appropriate independence requiring no further evaluation

B. This is solely a school-related issue requiring no further evaluation

C. This raises concern for supervisory neglect, warranting further evaluation and appropriate involvement of protective services

D. No further action is needed since the child was not physically injured

E. This should be addressed only through a conversation with the family, without any further reporting

72. A 5-year-old admitted for an unrelated medical issue is noted to have witnessed repeated violence between adults in the home. Which of the following is the most appropriate approach to this history?

A. No action is needed since the child was not directly physically harmed — a genuine competing possibility that remains less well supported by this presentation

B. Recognize this exposure as a significant concern for the child's safety and wellbeing, with appropriate screening, support, and involvement of social work as indicated

C. Focus exclusively on the medical issue without addressing this history in any way — a consideration that does not fully account for all of the findings described

D. Discharge the child home without any further consideration of this history — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Address this only if the child spontaneously brings it up again — a reasonable differential consideration, though less consistent with the specific findings described here

73. A 9-year-old presents with well-demarcated, erythematous plaques with silvery scale on the scalp, elbows, and knees, along with nail pitting. Which of the following is the most likely diagnosis?

- A. Atopic dermatitis, which typically involves flexural surfaces with a different scale pattern rather than this well-demarcated plaque appearance
- B. Tinea corporis, which would show a different scale pattern and would not explain the nail pitting
- C. Seborrheic dermatitis, which does not typically produce well-demarcated plaques with silvery scale at these specific sites
- D. Psoriasis, supported by the specific combination of findings in this case, the best-supported explanation given the findings described
- E. Pityriasis rosea, which presents with a different pattern of oval lesions rather than this specific plaque distribution

74. A 3-year-old with moderate atopic dermatitis has persistent flares despite consistent use of emollients and a low-potency topical corticosteroid. Which of the following is the most appropriate next step in a stepwise management approach?

- A. Discontinue all treatment and observe, since atopic dermatitis often resolves without further intervention
- B. Switch immediately to a systemic immunosuppressant without trying an intermediate topical step first
- C. Add an oral antibiotic as the next step regardless of signs of infection
- D. Step up therapy (eg, to a higher-potency topical corticosteroid or a topical calcineurin inhibitor) with continued emollient use and trigger avoidance
- E. Recommend strict avoidance of all bathing, which is not part of standard atopic dermatitis management

75. A 4-year-old presents with multiple small, flesh-colored, dome-shaped papules with central umbilication scattered on the trunk and extremities. Which of the following is the most likely diagnosis?

- A.** Warts (verruca), which have a different, rougher surface appearance rather than this specific umbilicated papule pattern
- B.** Milia, which are tiny superficial keratin cysts without the central umbilication described here
- C.** Varicella (chickenpox), which presents with vesicles on an erythematous base at varying stages rather than this specific umbilicated papule pattern
- D.** Eczema herpeticum, which presents with painful vesicles and erosions rather than these characteristic painless umbilicated papules
- E.** Molluscum contagiosum, which best explains the full combination of findings described in this vignette

76. A 12-year-old presents with a single large oval scaly patch (herald patch) followed several days later by numerous smaller oval scaly lesions distributed along skin lines on the trunk, without significant itching or systemic symptoms. Which of the following is the most likely diagnosis?

- A.** Pityriasis rosea, the diagnosis most consistent with the clinical picture presented here, supported by the specific combination of findings in this case
- B.** Guttate psoriasis, which presents with small drop-like plaques rather than this specific herald-patch pattern
- C.** Secondary syphilis, which would be expected to show additional systemic findings and a different risk factor history
- D.** Nummular eczema, which does not characteristically begin with a single herald patch followed by this specific distribution
- E.** Tinea corporis, which would present as a single or few annular lesions rather than this pattern following a herald patch

77. A 6-year-old presents with well-defined patches of depigmented (not hypopigmented) skin, symmetric in distribution, with no preceding rash, scale, or inflammation. Which of the following is the most likely diagnosis?

- A.** Tinea versicolor, which would show hypopigmentation with scale rather than complete depigmentation without scale
- B.** Post-inflammatory hypopigmentation, which would follow a preceding inflammatory skin condition, not present here

- C.** Pityriasis alba, which presents with subtle hypopigmentation and fine scale rather than complete depigmentation
- D.** Nevus depigmentosus, which is typically a stable, non-progressive congenital patch rather than this described pattern
- E.** Vitiligo, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette

78. A 7-year-old develops an intensely itchy, linear vesicular rash on the exposed forearm after playing outdoors, with clear borders corresponding to areas of direct plant contact. Which of the following is the most likely diagnosis?

- A.** Atopic dermatitis, which would not typically show this specific linear pattern tied to a plant exposure
- B.** Allergic contact dermatitis (eg, from poison ivy/oak exposure), the diagnosis most consistent with the clinical picture presented here
- C.** Scabies, which presents with a different distribution and burrow pattern rather than this linear exposure-related rash
- D.** Impetigo, which presents with honey-colored crusting rather than this vesicular, linear pattern
- E.** Tinea corporis, which presents with annular scaly lesions rather than this linear vesicular pattern

79. A 2-year-old on an exclusively cow's milk-based diet with minimal solid food intake presents with pallor and fatigue. Labs show microcytic, hypochromic anemia with low ferritin. Which of the following is the most likely diagnosis?

- A.** Thalassemia trait, which would show a different pattern of red cell indices and a positive family history rather than this dietary association
- B.** Anemia of chronic disease, which would be expected in the setting of an underlying chronic illness rather than this dietary history
- C.** Lead poisoning, which can cause microcytic anemia but would not explain the primary dietary pattern described as the main driver
- D.** Nutritional iron deficiency anemia, supported by the specific combination of findings in this case, the best-supported explanation given the findings described

E. Sideroblastic anemia, which is a rarer, distinct cause not primarily driven by this specific dietary pattern

80. A 6-year-old boy of Mediterranean descent develops acute pallor, dark urine, and jaundice 2 days after eating fava beans. Peripheral smear shows bite cells. Which of the following is the most likely diagnosis?

A. Hereditary spherocytosis, which would show spherocytes rather than bite cells and is not specifically triggered by fava bean ingestion

B. Glucose-6-phosphate dehydrogenase (G6PD) deficiency with an acute hemolytic episode

C. Sickle cell disease, which would show sickled cells on smear rather than bite cells

D. Autoimmune hemolytic anemia, which would show a positive direct Coombs test as the defining feature rather than this specific trigger and smear finding

E. Thalassemia major, which presents with chronic, not acute trigger-related, hemolysis

81. A 1-year-old presents with severe pallor, failure to thrive, and hepatosplenomegaly. Labs show a severe microcytic anemia, and hemoglobin electrophoresis confirms markedly reduced beta-globin chain production. Which of the following is the most likely diagnosis?

A. Beta-thalassemia major, which best explains the full combination of findings described in this vignette

B. Sickle cell disease, which would show a different hemoglobin electrophoresis pattern than described

C. Hereditary spherocytosis, which would not explain the specific hemoglobin electrophoresis findings described

D. G6PD deficiency, which causes episodic rather than this chronic, severe transfusion-dependent pattern

E. Iron deficiency anemia, which would not explain the hepatosplenomegaly or the specific hemoglobin electrophoresis findings

82. A 7-year-old presents with a rapidly enlarging abdominal mass and jaw swelling, with labs showing a very high LDH and evidence of a highly proliferative small round blue cell tumor on biopsy with a characteristic 'starry sky' pattern. Which of the following is the most likely diagnosis?

- A.** Hodgkin lymphoma, which would show Reed-Sternberg cells rather than this specific 'starry sky' pattern
- B.** Burkitt lymphoma (a form of non-Hodgkin lymphoma), the diagnosis most consistent with the clinical picture presented here
- C.** Wilms tumor, which arises from the kidney rather than presenting with this specific biopsy pattern and jaw involvement
- D.** Neuroblastoma, which would not explain this specific biopsy pattern and rapid tumor growth rate
- E.** Acute lymphoblastic leukemia, which would be expected to show peripheral blood/marrow blast involvement rather than this specific mass and biopsy pattern

83. A 2-year-old presents with a scalp rash, draining ear, and lytic bone lesions on skull radiograph. Biopsy of a skin lesion shows characteristic cells with reniform nuclei that stain positive for CD1a and S100. Which of the following is the most likely diagnosis?

- A.** Langerhans cell histiocytosis, supported by the specific combination of findings in this case
- B.** Osteomyelitis alone, which would not explain the specific biopsy findings described
- C.** Eczema, which would not explain the lytic bone lesions or the specific biopsy findings described
- D.** Leukemia cutis, which would show a different immunophenotype than the specific CD1a/S100 pattern described
- E.** Neuroblastoma, which would not explain this specific skin and bone biopsy pattern

84. A 16-year-old develops an unprovoked deep venous thrombosis without an identifiable acute risk factor. Which of the following is the most appropriate next step?

- A.** Immediate discontinuation of anticoagulation once initial symptoms improve, without further evaluation
- B.** No further evaluation is needed since venous thromboembolism in adolescents is always provoked by an identifiable cause
- C.** Evaluation for an underlying inherited or acquired thrombophilia, given the unprovoked nature of the clot

- D.** Assume this is solely related to oral contraceptive use, without considering other possible contributing factors
- E.** Genetic testing is never indicated in the pediatric population for this presentation

85. A 4-year-old with a known peanut allergy is being discharged after an allergic reaction. Which of the following is the most important component of discharge education for the family?

- A.** Proper use of an epinephrine autoinjector, recognition of anaphylaxis symptoms, and a clear action plan for future reactions
- B.** Avoidance counseling alone, without any specific plan for treating a future reaction
- C.** Reassurance that peanut allergies are always outgrown by school age, without further specific precautions
- D.** A recommendation to introduce peanuts again at home to test for tolerance
- E.** Antihistamine use alone as the primary emergency treatment plan for future reactions

86. A male infant presents with eczema, recurrent infections, and easy bruising with small platelets and thrombocytopenia on labs. Which of the following is the most likely diagnosis?

- A.** Severe combined immunodeficiency, which would not specifically explain the small platelet size or the classic triad described
- B.** Wiskott-Aldrich syndrome, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette
- C.** DiGeorge syndrome, which does not typically include this specific triad of eczema, infections, and small platelet thrombocytopenia
- D.** Chronic granulomatous disease, which does not typically present with this specific combination of eczema and small platelet thrombocytopenia
- E.** Common variable immunodeficiency, which is not typically diagnosed in early infancy and does not include this specific triad

87. A 10-year-old with seasonal nasal congestion, clear rhinorrhea, and itchy eyes has ongoing symptoms despite an oral antihistamine. Which of the following is the most appropriate next step in a stepwise management approach?

- A.** Discontinue all treatment since antihistamines are expected to fully control allergic rhinitis in all patients
- B.** Proceed directly to allergen immunotherapy without trying additional first-line medical therapy
- C.** Add an intranasal corticosteroid, a highly effective option for allergic rhinitis symptoms not controlled with antihistamines alone
- D.** Start a systemic corticosteroid as the next preferred step in routine management
- E.** Recommend avoiding all outdoor activity permanently as the primary management strategy

88. A child with spina bifida who has undergone multiple surgical procedures develops hives and wheezing during a subsequent surgical procedure shortly after exposure to surgical gloves. Which of the following is the most likely diagnosis?

- A.** A simple anxiety reaction to the surgical environment, which would not explain the hives and wheezing
- B.** An unrelated viral illness coincidentally occurring during the surgery, which would not explain this specific timing and reaction
- C.** A reaction to the anesthetic agent alone, without considering other specific allergen exposures
- D.** Irritant (non-allergic) contact dermatitis, which would not typically produce systemic hives and wheezing
- E.** Latex allergy, a recognized risk in patients with spina bifida given repeated latex exposure from multiple prior procedures

89. A family asks a hospitalist for guidance on appropriate car seat use for their 2-year-old prior to discharge. Which of the following best reflects current recommendations?

- A.** Keep the child in a rear-facing car seat as long as possible within the seat's height and weight limits, rather than switching to forward-facing at the earliest age allowed
- B.** Switch to forward-facing as soon as the child turns 1 year old, regardless of size — a plausible alternative that the particular details in this vignette argue against
- C.** Use a booster seat as soon as the child can sit upright independently — worth considering, but not the best fit given the constellation of findings presented

D. No specific car seat is needed once the child can walk independently — a genuine competing possibility that remains less well supported by this presentation

E. Seatbelt use alone is sufficient starting at age 2, without any car seat or booster — a consideration that does not fully account for all of the findings described

90. A 2-year-old is brought in after ingesting an unknown amount of a cannabis-infused edible found in the home. She is now lethargic with ataxia. Which of the following is the most appropriate approach?

A. Reassure and discharge immediately since cannabis ingestion is not dangerous in children

B. Administer activated charcoal as the only necessary intervention regardless of symptoms

C. Admit for observation and supportive care, given the risk of significant and prolonged sedation in young children after cannabis edible ingestion

D. Discharge with instructions to monitor at home, given a typically mild and short-lived course in this age group

E. Immediate intubation is required in all cases of pediatric cannabis ingestion regardless of symptom severity

91. A 16-year-old at a party develops agitation, hyperthermia, tachycardia, and hyponatremia after reportedly using a stimulant-type recreational drug along with drinking large amounts of water. Which of the following is the most likely explanation and priority concern?

A. MDMA (ecstasy) intoxication, with hyponatremia related to a combination of excessive free water intake and inappropriate antidiuretic hormone release

B. Simple heat exhaustion unrelated to any drug exposure, which would not explain the hyponatremia in this context

C. Opioid overdose, which would present with respiratory depression and miosis rather than this agitated, hyperthermic picture

D. Benzodiazepine overdose, which would present with sedation rather than this agitated, hyperthermic picture

E. Simple dehydration, which would not explain the hyponatremia given the large water intake described

92. A 15-year-old presents after an intentional aspirin overdose with tachypnea, tinnitus, and a mixed respiratory alkalosis and metabolic acidosis on blood gas. Which of the following is the most appropriate management priority?

- A.** Naloxone as the primary treatment for this presentation — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** Sodium bicarbonate withheld entirely regardless of the degree of toxicity — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** Urine and/or serum alkalinization with sodium bicarbonate to enhance salicylate elimination, along with supportive care
- D.** Flumazenil as the primary treatment for this presentation — a plausible alternative that the particular details in this vignette argue against
- E.** Observation alone without any specific treatment, given the mixed acid-base picture — worth considering, but not the best fit given the constellation of findings presented

93. A 14-year-old sustains multiple injuries after an all-terrain vehicle (ATV) rollover without a helmet, including a head injury and an extremity fracture. Which of the following is most important regarding the overall approach to this presentation?

- A.** A full trauma evaluation is warranted given the mechanism, since ATV-related injuries carry a significant risk of multi-system trauma, particularly head injury when unhelmeted
- B.** Only the extremity fracture requires evaluation, since it is the most visible injury — a genuine competing possibility that remains less well supported by this presentation
- C.** No further evaluation beyond the obvious fracture is needed if the child is initially alert — a consideration that does not fully account for all of the findings described
- D.** Head imaging can be deferred indefinitely if the child has no immediate symptoms — clinically plausible in isolation, but this case's specific findings point elsewhere
- E.** ATV-related injuries are generally minor and do not require a systematic trauma evaluation — a reasonable differential consideration, though less consistent with the specific findings described here

94. A 15-year-old is brought in after being found with an aerosol can, disoriented with slurred speech and a cardiac arrhythmia noted on monitor. Which of the following is the most likely explanation?

- A.** Simple alcohol intoxication, which would not specifically explain the direct temporal association with aerosol can use
- B.** Opioid intoxication, which would present with respiratory depression and miosis rather than this specific presentation
- C.** Cannabis intoxication, which would not typically explain this specific cardiac arrhythmia finding
- D.** Benzodiazepine intoxication, which would not specifically explain the direct temporal association with aerosol inhalant use
- E.** Inhalant abuse (huffing), which can cause direct cardiotoxicity and arrhythmia from the inhaled volatile substance

95. A hospitalist is providing anticipatory guidance to a family with a toddler regarding home water safety. Which of the following is the most important counseling point?

- A.** Swimming lessons alone are sufficient to prevent all drowning risk, without any other precautions needed
- B.** Bath seats provide adequate supervision on their own, without the need for continuous adult presence
- C.** Pool fencing is unnecessary if the family reports being generally attentive
- D.** Constant, direct adult supervision within arm's reach during any water exposure, since even brief lapses in supervision can result in drowning
- E.** Flotation devices alone are sufficient supervision for a toddler around any body of water

96. A hospitalist is counseling a family with children about firearm safety in the home. Which of the following best reflects recommended guidance?

- A.** No specific storage precautions are needed if the family reports being careful — a plausible alternative that the particular details in this vignette argue against
- B.** Firearms should be stored unloaded and locked, with ammunition stored separately and locked, to reduce the risk of unintentional injury
- C.** Children should simply be told not to touch firearms, without any additional storage precautions — worth considering, but not the best fit given the constellation of findings presented

D. Storing firearms loaded but out of sight is considered adequate — a genuine competing possibility that remains less well supported by this presentation

E. Firearm safety counseling is not an appropriate topic to discuss during a medical encounter — a consideration that does not fully account for all of the findings described

97. A 2-year-old is found with an open container belonging to a family member who uses methamphetamine, and the child is now agitated with tachycardia, hypertension, and dilated pupils. Which of the following is the most appropriate approach?

A. Reassure and discharge immediately since children are not typically affected by this type of exposure — clinically plausible in isolation, but this case's specific findings point elsewhere

B. Administer a stimulant medication to counteract the presumed opposite effect — a reasonable differential consideration, though less consistent with the specific findings described here

C. Admit for supportive care and monitoring, including benzodiazepines for significant agitation as needed, given risk of significant toxicity from methamphetamine exposure in a young child

D. No specific monitoring is needed beyond a single set of vital signs — a plausible alternative that the particular details in this vignette argue against

E. Immediate hemodialysis as the primary treatment for this exposure — worth considering, but not the best fit given the constellation of findings presented

98. A 16-year-old is found unresponsive with pinpoint pupils and a respiratory rate of 4 breaths per minute after a suspected opioid overdose. Which of the following is the most appropriate immediate treatment?

A. Flumazenil as the primary treatment for this presentation

B. Naloxone administration along with supportive respiratory management

C. Activated charcoal as the primary and sufficient treatment for this presentation

D. Atropine as the primary treatment for this presentation

E. Sodium bicarbonate as the primary treatment for this presentation

99. A 6-year-old undergoing chemotherapy for leukemia presents with fever and an absolute neutrophil count of 300/mm³. Which of the following is the most appropriate immediate management?

- A.** Observation alone with antipyretics, given a well appearance on initial assessment — a genuine competing possibility that remains less well supported by this presentation
- B.** Oral antibiotics as outpatient management, given a well appearance on initial assessment — a consideration that does not fully account for all of the findings described
- C.** Delay antibiotics until blood culture results are available — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Prompt evaluation and empiric broad-spectrum IV antibiotics, given the risk of rapid deterioration from infection in the setting of neutropenic fever
- E.** Antipyretics alone, since fever is expected during chemotherapy and does not require further evaluation — a reasonable differential consideration, though less consistent with the specific findings described here

100. A 4-month-old with an unrepaired large ventricular septal defect presents with poor weight gain and increased work of breathing with feeds, without another identified cause of poor growth. Which of the following best explains the growth pattern?

- A.** Failure to thrive related to increased caloric expenditure and feeding difficulty from underlying heart failure due to the cardiac defect
- B.** Simple inadequate caloric intake unrelated to the cardiac defect, with no cardiac contribution to consider
- C.** Celiac disease, which is unrelated to a cardiac defect of this type
- D.** Cystic fibrosis, which is unrelated to this cardiac history and presentation
- E.** Normal growth pattern requiring no further evaluation given the underlying cardiac diagnosis alone

101. A newborn found to be significantly hypothermic after an unattended home delivery is brought to the hospital. Which of the following is the most appropriate approach to rewarming in this specific population?

- A.** Gradual, controlled rewarming with close monitoring for complications, given the particular vulnerability of neonates to rapid temperature shifts and associated metabolic derangements
- B.** Immediate rapid rewarming with hot water immersion regardless of the degree of hypothermia — a plausible alternative that the particular details in this vignette argue against

- C.** No specific rewarming approach differs for neonates compared with older children — worth considering, but not the best fit given the constellation of findings presented
- D.** Rewarming should be delayed until the infant reaches a specialized center, regardless of transport time — a genuine competing possibility that remains less well supported by this presentation
- E.** Vigorous rubbing of the skin to generate heat as the primary rewarming method — a consideration that does not fully account for all of the findings described

102. An infant with severe hyponatremia from inadequate free water intake is being treated. Which of the following is most important regarding the correction of the sodium level?

- A.** Correction should be achieved using only hypertonic fluids regardless of the direction of the abnormality
- B.** Rapid correction to a normal sodium level within a few hours regardless of the chronicity of the hyponatremia
- C.** No specific rate of correction matters as long as the sodium eventually normalizes
- D.** Gradual correction of the sodium over an appropriate time course, since overly rapid correction of chronic hyponatremia risks cerebral edema and seizures
- E.** Free water restriction is the correct treatment for hyponatremia from inadequate intake

103. A 14-year-old with significant anxiety develops perioral and hand paresthesias, lightheadedness, and rapid breathing during an anxiety episode. Blood gas shows a low PCO₂ with an elevated pH. Which of the following is the most likely explanation?

- A.** Metabolic alkalosis from an unrelated gastrointestinal cause, which would not explain the acute anxiety-related presentation described
- B.** Diabetic ketoacidosis, which would show acidosis rather than this alkalotic picture
- C.** Salicylate toxicity, which would show a mixed picture rather than this isolated pattern in this specific clinical context
- D.** Central sleep apnea, which would not explain this acute presentation during an anxiety episode
- E.** Acute hyperventilation-induced respiratory alkalosis related to the anxiety episode

104. A 16-year-old presents with debilitating fatigue lasting more than 6 months that is not relieved by rest, worsened by exertion, along with unrefreshing sleep and cognitive difficulties, with an extensive medical workup that has been unremarkable. Which of the following is the most likely diagnosis?

- A.** Iron deficiency anemia, which would be expected to show an abnormality on the medical workup already performed
- B.** Hypothyroidism, which would be expected to show an abnormal thyroid function test on the workup already performed
- C.** Simple deconditioning, which would not fully account for post-exertional worsening and cognitive difficulty in this specific pattern
- D.** Myalgic encephalomyelitis/chronic fatigue syndrome, the diagnosis most consistent with the clinical picture presented here
- E.** Depression alone, which does not fully account for the specific post-exertional symptom pattern described, though mood should still be assessed as part of a comprehensive evaluation

105. A 12-year-old develops rapidly progressive psychiatric symptoms, memory problems, abnormal movements, and seizures over several weeks following a nonspecific viral illness. Which of the following is the most important diagnosis to consider given this presentation?

- A.** Primary psychotic disorder alone, which would not typically explain the abnormal movements or seizures in this acute pattern
- B.** Simple viral encephalitis from HSV alone, without considering other autoimmune causes
- C.** Conversion disorder, which would not explain the seizures or the specific movement abnormalities described
- D.** Substance-induced psychosis, without a supporting history of substance use
- E.** Autoimmune (eg, anti-NMDA receptor) encephalitis, supported by the specific combination of findings in this case

106. A 15-year-old on a strict vegan diet without supplementation presents with fatigue, pallor, and glossitis. Labs show a macrocytic anemia and neurologic symptoms including paresthesias. Which of the following is the most likely diagnosis?

- A.** Vitamin B12 deficiency, the best-supported explanation given the findings described
- B.** Iron deficiency anemia, which would show a microcytic rather than macrocytic pattern

- C. Folate deficiency alone, which would not typically explain the neurologic paresthesias in the same way
- D. Thalassemia trait, which would show a microcytic pattern and would not explain the dietary history or neurologic findings
- E. Lead poisoning, which would not be specifically explained by this dietary history

107. A 3-year-old with a slim build presents with recurrent episodes of hypoglycemia during prolonged fasting (such as illness with poor intake), with ketosis present at the time of hypoglycemia and resolution with adequate feeding. Extensive metabolic workup has been reassuring. Which of the following is the most likely diagnosis?

- A. Ketotic hypoglycemia of childhood, which best explains the full combination of findings described in this vignette
- B. An inborn error of fatty acid oxidation, which would be expected to show an abnormality on the metabolic workup performed
- C. Addison disease, which would show additional electrolyte and clinical findings not described here
- D. Congenital hyperinsulinism, which would show an inappropriately low, not elevated, ketone level at the time of hypoglycemia
- E. Glycogen storage disease, which would be expected to show additional findings such as hepatomegaly and an abnormal metabolic workup

108. A 10-year-old with a family history of migraine presents with recurrent episodes of severe abdominal pain lasting hours, associated with nausea and pallor, with symptom-free intervals between episodes and a normal extensive GI workup. Which of the following is the most likely diagnosis?

- A. Malrotation with intermittent volvulus, which would not be expected to have a normal workup between episodes
- B. Appendicitis, which would present acutely rather than as recurrent, self-limited episodes with symptom-free intervals
- C. Inflammatory bowel disease, which would be expected to show an abnormality on the extensive GI workup performed
- D. Peptic ulcer disease, which would be expected to show endoscopic findings on the workup performed

E. Abdominal migraine, the diagnosis most consistent with the clinical picture presented here

109. A child with a chronic condition requiring daily medication has had multiple hospital readmissions, and further inquiry reveals inconsistent access to the medication at home due to cost and logistical barriers, despite the family's clear intent to adhere to the regimen. Which of the following is the most appropriate approach?

A. Assume the family is simply non-adherent by choice and provide no further support — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here

B. Identify and address the specific barriers to medication access (eg, connecting the family with cost-assistance or logistical support resources) as part of discharge planning, rather than assuming intentional nonadherence

C. Discharge with the same prescription and no additional support, since the medication itself has already been prescribed correctly — a plausible alternative that the particular details in this vignette argue against

D. Refer the family for medical neglect without first exploring the specific barriers involved — worth considering, but not the best fit given the constellation of findings presented

E. Increase the medication dose to compensate for inconsistent access, without addressing the access issue itself — a genuine competing possibility that remains less well supported by this presentation

110. An infant is brought in after being inadvertently left in a hot car for an extended period, with a markedly elevated temperature and altered mental status. Which of the following is the most appropriate immediate priority?

A. Oral fluids alone as the primary treatment for this presentation — a consideration that does not fully account for all of the findings described

B. Aggressive active cooling measures and supportive care, given concern for severe heat-related illness (heat stroke) in a particularly vulnerable young infant

C. Delay cooling measures until arrival at a specialized pediatric facility, regardless of transport time — clinically plausible in isolation, but this case's specific findings point elsewhere

D. Observation alone without active cooling measures, given the infant's young age — a reasonable differential consideration, though less consistent with the specific findings described here

E. Antipyretic medication alone as the primary treatment for this degree of temperature elevation — a plausible alternative that the particular details in this vignette argue against

111. A 9-year-old presents with distinct episodes of elevated, expansive mood, decreased need for sleep, and impulsive behavior lasting several days, alternating with separate periods of depressed mood, distinguishable from his usual baseline behavior. Which of the following is most important in evaluating this presentation?

A. Careful longitudinal assessment to distinguish episodic mood disturbance consistent with a bipolar spectrum disorder from other conditions with overlapping features (eg, ADHD, disruptive mood dysregulation disorder), given the important treatment and prognostic differences

B. Immediate diagnosis of bipolar disorder based on a single reported episode alone, without further longitudinal assessment — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation

C. Assume this represents simple age-appropriate behavior requiring no further evaluation — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

D. Diagnose ADHD alone without considering the distinct episodic mood pattern described — a reasonable differential consideration, though less consistent with the specific findings described here — a plausible alternative that the particular details in this vignette argue against

E. Defer any evaluation until adulthood, since mood disorders cannot be meaningfully assessed in this age group — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation

112. A 10-year-old hospitalized for an unrelated medical issue is noted to perform elaborate, time-consuming handwashing rituals and reports intrusive, distressing thoughts about contamination that he feels driven to act on. Which of the following is the most likely diagnosis?

A. Simple hygiene-consciousness related to hospitalization, which would not explain the distress or the compulsive, time-consuming nature of the behavior

B. Generalized anxiety disorder alone, which does not specifically capture this pattern of intrusive thoughts and compulsive rituals

C. Obsessive-compulsive disorder, supported by the specific combination of findings in this case, the best-supported explanation given the findings described

- D.** Autism spectrum disorder alone, which would not specifically explain this pattern of intrusive, distressing thoughts driving compulsive behavior
- E.** A specific phobia of germs alone, which does not fully capture the compulsive ritual component described

113. A 5-year-old consistently fails to speak in certain settings (such as school) despite speaking normally and comfortably at home, over a period of several months, without a language delay identified on evaluation. Which of the following is the most likely diagnosis?

- A.** A primary expressive language disorder, which would be expected to affect speech across all settings rather than this setting-specific pattern
- B.** Autism spectrum disorder alone, which does not specifically capture this setting-specific speaking pattern without other associated diagnostic features
- C.** Selective mutism, which best explains the full combination of findings described in this vignette, the diagnosis most consistent with the clinical picture presented here
- D.** Hearing loss, which would be expected to affect speech and language across all settings rather than this pattern
- E.** Simple shyness requiring no further evaluation, despite the persistence and functional impact over months

114. A hospitalized child with a moderate intellectual disability becomes acutely agitated and aggressive in the unfamiliar hospital environment. Which of the following is the most appropriate first-line approach?

- A.** Identify and address potential contributing factors (eg, communication difficulty, sensory overload, unmet needs, pain), using individualized behavioral strategies and environmental modification as first-line management
- B.** Immediate physical restraint as the first intervention — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- C.** Sedation as the first-line approach without first attempting to identify contributing factors — a reasonable differential consideration, though less consistent with the specific findings described here

D. Ignore the behavior entirely without any response from staff — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented

E. Discharge regardless of the underlying medical reason for admission — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described

115. A 17-year-old with an opioid use disorder is hospitalized and expresses interest in starting long-term treatment. Which of the following best reflects an evidence-based approach to his care?

A. Abstinence-only counseling without consideration of medication-based treatment options — clinically plausible in isolation, but this case's specific findings point elsewhere

B. No treatment options exist for adolescents with this condition — a reasonable differential consideration, though less consistent with the specific findings described here

C. Detoxification alone without any plan for long-term treatment after discharge — a plausible alternative that the particular details in this vignette argue against

D. Punitive consequences as the primary approach to his substance use — worth considering, but not the best fit given the constellation of findings presented

E. Consideration of medication for opioid use disorder (eg, buprenorphine) as part of a comprehensive treatment plan, in addition to counseling and support, given evidence supporting this approach

116. An 8-year-old develops abrupt-onset severe obsessive-compulsive symptoms and tics shortly after a documented streptococcal infection. Which of the following is the most likely diagnosis being considered?

A. Idiopathic Tourette syndrome, which would not typically show this abrupt onset tied specifically to a preceding streptococcal infection

B. Simple viral-triggered anxiety, which does not capture this specific abrupt symptom pattern and infectious association

C. Sydenham chorea alone, which presents primarily with choreiform movements rather than this specific abrupt obsessive-compulsive symptom pattern

D. PANDAS (pediatric autoimmune neuropsychiatric disorder associated with streptococcal infections)

E. Simple exacerbation of an unrelated pre-existing anxiety disorder, without considering the specific infectious association

117. A young child with a history of severe early neglect exhibits a pattern of not seeking comfort from caregivers when distressed and shows minimal social and emotional responsiveness, inconsistent with expected developmental attachment behavior. Which of the following is the most likely diagnosis?

- A. Autism spectrum disorder alone, which is not specifically defined by this history of neglect and attachment disruption pattern
- B. Normal temperament variation, which would not explain this specific pattern in the context of documented severe early neglect
- C. Reactive attachment disorder, supported by the specific combination of findings in this case, the best-supported explanation given the findings described
- D. Selective mutism, which does not specifically capture this broader pattern of disrupted attachment behavior
- E. Generalized anxiety disorder alone, which does not specifically capture this attachment-related presentation

118. A 13-year-old has multiple persistent physical symptoms without an identifiable medical explanation despite extensive workup, along with excessive time and energy devoted to health concerns significantly impacting daily functioning. Which of the following is the most likely diagnosis?

- A. Malingering, which implies intentional symptom fabrication for external gain rather than this genuine distress and preoccupation
- B. Factitious disorder, which involves deliberate falsification rather than this genuine symptom experience and distress
- C. A single, still-undiagnosed medical condition, without further consideration of a functional somatic contribution despite the extensive prior workup
- D. Malingering by proxy (imposed by another), which involves a caregiver fabricating symptoms rather than this presentation
- E. Somatic symptom disorder, which best explains the full combination of findings described in this vignette

119. A 12-year-old recently diagnosed with a new chronic illness develops low mood, worry, and difficulty adjusting to the diagnosis over the following weeks, with symptoms that are distressing but do not meet full criteria for a major depressive or anxiety disorder. Which of the following is the most likely diagnosis?

- A.** Major depressive disorder, which requires meeting full diagnostic criteria not present in this description
- B.** Generalized anxiety disorder, which requires meeting full diagnostic criteria not present in this description
- C.** Post-traumatic stress disorder, which requires specific trauma-related symptom criteria not described here
- D.** No diagnosis is applicable, and the symptoms should be disregarded despite their distressing nature
- E.** Adjustment disorder related to the new chronic illness diagnosis

120. A 16-year-old develops new-onset auditory hallucinations, disorganized thinking, and social withdrawal over the past month, without an identified substance use history or medical cause after initial evaluation. Which of the following is the most appropriate next step?

- A.** Attribute the symptoms solely to typical adolescent behavior without further psychiatric evaluation — a genuine competing possibility that remains less well supported by this presentation
- B.** Reassurance alone without further evaluation, since these symptoms are common and expected in adolescence — a consideration that does not fully account for all of the findings described
- C.** Immediate long-term antipsychotic therapy without further diagnostic evaluation — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Comprehensive evaluation (including ruling out medical, substance-related, and other causes) and psychiatric referral for a first-episode psychosis presentation, given the importance of early intervention
- E.** Defer any evaluation until symptoms have persisted for at least one year — a reasonable differential consideration, though less consistent with the specific findings described here

121. A 9-year-old has multiple motor tics (eg, eye blinking, shoulder shrugging) and a vocal tic present for over a year, waxing and waning in severity, with mild functional impact at school. Which of the following is the most likely diagnosis?

- A.** Tourette syndrome, the diagnosis most consistent with the clinical picture presented here
- B.** Simple habitual behavior, which would not explain this specific combination of motor and vocal tics over this duration
- C.** Myoclonic seizures, which would show a different, more sudden and less voluntary-appearing pattern on evaluation
- D.** A transient tic disorder, which by definition lasts less than one year, unlike this presentation
- E.** Chorea, which presents with different, more irregular, dance-like movements rather than this specific tic pattern

122. A 6-year-old with significant needle phobia requires a blood draw as part of his hospitalization. Which of the following is the most appropriate approach to minimize distress?

- A.** Proceed with the blood draw without any preparation or support, since delaying could prolong the child's anxiety — a plausible alternative that the particular details in this vignette argue against
- B.** Use physical restraint as the primary strategy to complete the procedure quickly — worth considering, but not the best fit given the constellation of findings presented
- C.** Postpone all necessary blood draws indefinitely to avoid any distress — a genuine competing possibility that remains less well supported by this presentation
- D.** Use developmentally appropriate preparation, distraction techniques, topical anesthetic when feasible, and involve child life support to help the child cope with the procedure
- E.** Sedate the child for every future blood draw regardless of severity of distress — a consideration that does not fully account for all of the findings described

123. A 10-day-old presents with vesicular skin lesions, lethargy, and seizures. The mother reports a history of genital lesions around the time of delivery. Which of the following is the most appropriate immediate management?

- A.** Oral antiviral therapy as an outpatient, given the mild appearance of the skin lesions alone
- B.** Reassurance that vesicular lesions in a newborn are typically benign and require no treatment
- C.** Prompt evaluation and initiation of IV acyclovir given concern for disseminated neonatal herpes simplex virus infection
- D.** Topical antiviral cream applied to the lesions alone, without systemic therapy

E. Observation alone with a repeat exam in 48 hours before starting any treatment

124. A term newborn with a markedly elevated, unmonitored total bilirubin develops lethargy, poor feeding, a high-pitched cry, and arching of the back (opisthotonus). Which of the following is the most likely diagnosis and priority action?

A. Acute bilirubin encephalopathy (kernicterus risk), requiring emergent treatment (including likely exchange transfusion) to prevent permanent neurologic injury

B. Simple physiologic jaundice, which would not present with these specific neurologic findings — clinically plausible in isolation, but this case's specific findings point elsewhere

C. Neonatal sepsis alone, without considering the markedly elevated bilirubin as a contributing cause — a reasonable differential consideration, though less consistent with the specific findings described here

D. Normal newborn behavior requiring only continued observation — a plausible alternative that the particular details in this vignette argue against

E. Breast milk jaundice, which would not be expected to cause these specific severe neurologic findings — worth considering, but not the best fit given the constellation of findings presented

125. A newborn has chorioretinitis, intracranial calcifications with a different pattern than typically seen with other congenital infections, and hydrocephalus. Maternal history includes cat exposure and consumption of undercooked meat during pregnancy. Which of the following is the most likely diagnosis?

A. Congenital rubella syndrome, which does not typically produce this specific triad and is not associated with this maternal exposure history

B. Congenital CMV infection, which typically shows a different pattern of calcifications and is not specifically associated with this maternal exposure history

C. Congenital toxoplasmosis, supported by the specific combination of findings in this case, the best-supported explanation given the findings described

D. Congenital syphilis, which produces a different pattern of findings not centered on chorioretinitis and hydrocephalus

E. Congenital Zika virus infection, which is not specifically associated with this maternal exposure history

126. A 5-day-old develops fever, lethargy, and a bulging fontanelle. CSF studies show a neutrophilic pleocytosis, low glucose, and gram-positive cocci in chains on Gram stain. Which of the following is the most likely causative organism and priority treatment?

- A.** Group B Streptococcus, requiring prompt initiation of appropriate IV antibiotics for neonatal bacterial meningitis
- B.** Escherichia coli, which would appear as gram-negative rather than gram-positive organisms on Gram stain
- C.** Herpes simplex virus, which would not show this bacterial Gram stain and CSF chemistry pattern
- D.** Candida species, which would appear as budding yeast rather than gram-positive cocci in chains
- E.** Listeria monocytogenes, which would appear as gram-positive rods rather than cocci in chains on Gram stain

127. A former 26-week preterm infant is found on cranial ultrasound at several weeks of age to have areas of periventricular white matter injury with cystic changes. Which of the following is the most likely long-term concern given this finding?

- A.** No long-term concern, since this finding is expected and benign in all preterm infants
- B.** Isolated risk of hearing loss alone, without other long-term developmental implications
- C.** Isolated risk of retinopathy of prematurity alone, unrelated to this specific brain imaging finding
- D.** This finding indicates a need for immediate neurosurgical intervention regardless of the child's clinical status
- E.** Increased risk of cerebral palsy and other long-term neurodevelopmental impairment related to periventricular leukomalacia

128. A former 27-week preterm infant develops a sudden drop in hematocrit, a bulging fontanelle, and apnea at several days of life. Cranial ultrasound shows blood within the ventricular system with ventricular dilation. Which of the following is the most likely diagnosis?

- A.** Periventricular leukomalacia, which shows white matter injury rather than this specific hemorrhage and ventricular finding pattern
- B.** Simple physiologic anemia of prematurity, which would not explain the bulging fontanelle or hemorrhage seen on ultrasound

- C.** Meningitis alone, which would not explain the specific hemorrhage and ventricular dilation on ultrasound without other supporting findings
- D.** Intraventricular hemorrhage with resulting ventricular dilation, which best explains the full combination of findings described in this vignette
- E.** A subdural hematoma from birth trauma, which would show a different imaging pattern than this intraventricular finding

129. An extremely preterm infant develops sudden abdominal distension and pneumoperitoneum on radiograph within the first days of life, without the more gradual, multi-day feeding intolerance and pneumatosis pattern typically seen with a different major neonatal GI complication. Which of the following is the most likely diagnosis?

- A.** Hirschsprung disease, which would present with delayed meconium passage rather than this acute perforation pattern
- B.** Necrotizing enterocolitis, which would be expected to show a more gradual course with pneumatosis rather than this acute pattern without pneumatosis
- C.** Malrotation with volvulus, which is not specifically associated with extreme prematurity in this way
- D.** Spontaneous intestinal perforation, the diagnosis most consistent with the clinical picture presented here
- E.** Meconium ileus, which is typically associated with cystic fibrosis rather than this presentation in an extremely preterm infant

130. A former extremely preterm infant on prolonged parenteral nutrition is found to have low bone mineral density and a healing rib fracture without a clear traumatic history. Which of the following is the most likely explanation?

- A.** Osteopenia of prematurity (metabolic bone disease of prematurity) related to inadequate mineral intake and prolonged parenteral nutrition
- B.** Osteogenesis imperfecta as the most likely and sole explanation, without considering the infant's specific nutritional and prematurity risk factors
- C.** Non-accidental trauma as the only possible explanation, without considering the infant's specific nutritional and prematurity-related risk factors

D. A normal expected finding in all preterm infants requiring no further evaluation or nutritional consideration

E. Rickets from vitamin D deficiency alone, without considering the broader contribution of prematurity and parenteral nutrition

131. A newborn of a mother with known systemic lupus erythematosus and positive anti-Ro/La antibodies develops an annular, scaly rash on the scalp and face in the first weeks of life. Which of the following is the most likely diagnosis, and what associated finding should also be assessed?

A. Erythema toxicum neonatorum, a benign self-limited rash unrelated to maternal antibody status

B. Seborrheic dermatitis alone, which is not specifically associated with maternal antibody status

C. Congenital candidiasis, which is not specifically associated with maternal antibody status

D. A simple contact irritant dermatitis, which is not specifically associated with maternal antibody status

E. Neonatal lupus (cutaneous), and the infant should also be assessed for congenital heart block given the shared antibody-mediated mechanism

132. A newborn presents with severe hypotonia, feeding and respiratory difficulty, and a distinctive facial appearance with tented lips. The mother has a history of mild, previously undiagnosed muscle weakness and myotonia. Which of the following is the most likely diagnosis?

A. Prader-Willi syndrome, which has a different genetic mechanism and is not specifically associated with this maternal history

B. Spinal muscular atrophy, which is not specifically associated with this maternal history of myotonia

C. Congenital myotonic dystrophy, supported by the specific combination of findings in this case, the best-supported explanation given the findings described

D. Werdnig-Hoffmann disease (a form of spinal muscular atrophy), which is not specifically associated with this maternal myotonia history

E. Simple birth-related hypotonia without an underlying genetic condition, which would not explain this specific maternal history

133. An infant has a history of recurrent coughing and choking with feeds and recurrent pneumonia, but is able to pass a nasogastric tube into the stomach without difficulty, unlike the more commonly recognized presentation of a related congenital anomaly. Which of the following is the most likely diagnosis?

- A.** H-type tracheoesophageal fistula (without esophageal atresia), which best explains the full combination of findings described in this vignette
- B.** Isolated esophageal atresia without a fistula, which would also prevent passage of a nasogastric tube into the stomach
- C.** Classic esophageal atresia with distal tracheoesophageal fistula, which would prevent passage of a nasogastric tube into the stomach
- D.** Laryngeal cleft alone, without considering a tracheoesophageal connection as the explanation for the recurrent aspiration symptoms
- E.** Simple gastroesophageal reflux, which would not explain the recurrent pneumonia and choking pattern in this way

134. A newborn develops mild eye redness and discharge within the first day of life, shortly after erythromycin ointment prophylaxis was applied at birth. The discharge is not purulent, and the infant is otherwise well. Which of the following is the most likely diagnosis?

- A.** Nasolacrimal duct obstruction, which typically presents with persistent tearing rather than this acute pattern immediately after prophylaxis
- B.** Gonococcal conjunctivitis, which typically presents with more significant purulent discharge and later onset than described here
- C.** Chlamydial conjunctivitis, which typically presents later (around 5-14 days of life) rather than within the first day
- D.** Chemical conjunctivitis related to the prophylactic ointment, a mild and self-limited process
- E.** Herpes simplex virus conjunctivitis, which would be expected to show additional systemic or vesicular findings

135. A former 28-week preterm infant has a persistent patent ductus arteriosus with signs of hemodynamic significance (bounding pulses, a widened pulse pressure, and worsening respiratory status). Which of the following is the most appropriate management consideration?

A. No treatment is ever indicated for a PDA in preterm infants regardless of hemodynamic significance — a genuine competing possibility that remains less well supported by this presentation

B. Immediate surgical ligation is required in all cases regardless of an initial trial of medical therapy — a consideration that does not fully account for all of the findings described

C. Consideration of pharmacologic closure (eg, with a cyclooxygenase inhibitor) or, if that fails or is contraindicated, surgical closure, guided by the degree of hemodynamic significance and clinical status

D. Observation alone is always sufficient regardless of the degree of hemodynamic significance — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Prostaglandin E1 infusion to maintain, rather than close, the ductus in this specific clinical scenario — a reasonable differential consideration, though less consistent with the specific findings described here

136. A newborn presents with cataracts, a heart defect, and sensorineural hearing loss. Maternal history reveals an unvaccinated status and a rash illness early in pregnancy. Which of the following is the most likely diagnosis?

A. Congenital CMV infection, which does not classically present with this specific triad of cataracts, cardiac defect, and hearing loss

B. Congenital toxoplasmosis, which does not classically present with this specific triad

C. Congenital syphilis, which does not classically present with this specific triad of findings

D. Congenital varicella syndrome, which presents with a different characteristic pattern of findings (eg, limb defects, skin scarring) than this triad

E. Congenital rubella syndrome, the diagnosis most consistent with the clinical picture presented here

137. A newborn is noted to have a persistent, reticulated, mottled purplish discoloration of the skin present at birth, most pronounced on the extremities, with associated skin atrophy in some areas, that does not fully resolve with warming. Which of the following is the most likely diagnosis?

A. Simple physiologic cutis marmorata, which is transient and resolves with warming, unlike this persistent finding

- B.** Erythema toxicum neonatorum, which presents with a different pustular/papular pattern rather than this reticulated, atrophic mottling
- C.** Harlequin ichthyosis, which presents with a distinctly different, severe scaling pattern rather than this reticulated mottling
- D.** Cutis marmorata telangiectatica congenita, supported by the specific combination of findings in this case
- E.** Simple neonatal acrocyanosis, which is transient and resolves quickly, unlike this persistent finding

138. A newborn's routine metabolic screen returns with an abnormal result flagged for a treatable condition. The infant currently appears clinically well. Which of the following is the most appropriate next step?

- A.** No further action is needed since the infant currently appears well — a plausible alternative that the particular details in this vignette argue against
- B.** Wait until the next routine well-child visit to discuss the result — worth considering, but not the best fit given the constellation of findings presented
- C.** Assume the result is a laboratory error without further confirmatory testing — a genuine competing possibility that remains less well supported by this presentation
- D.** Prompt contact with the family and arrangement of confirmatory testing and specialist follow-up, given the time-sensitive nature of many conditions detected on newborn screening
- E.** Repeat the screening test using the same original sample rather than obtaining a new sample — a consideration that does not fully account for all of the findings described

139. A child with a chronic pain condition related to an underlying medical complexity has been managed with escalating opioid doses without significant functional improvement. Which of the following is the most appropriate next step in a comprehensive approach to his pain management?

- A.** Continue increasing the opioid dose indefinitely regardless of functional outcomes — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Discontinue all pain management interventions entirely without an alternative plan — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented

C. Add a second opioid at a similarly escalating dose without further evaluation — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described

D. Refer exclusively to a single specialist without a broader interdisciplinary approach — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here

E. Consider a broader interdisciplinary approach (eg, physical therapy, psychological support, and non-opioid pharmacologic options) alongside reassessment of the current regimen, given limited functional benefit from opioid escalation alone

140. A non-ambulatory child with severe cerebral palsy sustains a low-impact fracture during a routine transfer. Which of the following is most important to consider regarding his bone health?

A. No specific bone health considerations are relevant in this population — a plausible alternative that the particular details in this vignette argue against

B. Increased risk of osteoporosis/reduced bone mineral density related to non-ambulatory status, which may warrant evaluation and consideration of preventive strategies

C. This finding should be attributed solely to abuse without considering the child's underlying bone health risk factors — worth considering, but not the best fit given the constellation of findings presented

D. Bone health assessment is only relevant if the child has sustained multiple prior fractures — a genuine competing possibility that remains less well supported by this presentation

E. This finding is expected and requires no further evaluation or preventive consideration — a consideration that does not fully account for all of the findings described

141. A child with severe neurologic impairment has significant sialorrhea (drooling) causing skin breakdown and social impact. Which of the following best reflects an appropriate stepwise approach to management?

A. Surgical intervention is always the first-line treatment regardless of severity — clinically plausible in isolation, but this case's specific findings point elsewhere

B. No treatment options exist for this symptom — a reasonable differential consideration, though less consistent with the specific findings described here — a plausible alternative that the particular details in this vignette argue against

C. Fluid restriction as the primary and sufficient intervention — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation

D. A stepwise approach starting with behavioral/positioning strategies, then medication (eg, anticholinergic agents) if needed, with surgical or botulinum toxin options considered for refractory cases

E. Antibiotics as the primary treatment for this symptom — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

142. A non-ambulatory child with a neuromuscular disease has chronic constipation not adequately managed with dietary measures alone. Which of the following is the most appropriate next step?

A. No further intervention is needed since constipation is expected and does not require treatment in this population — a reasonable differential consideration, though less consistent with the specific findings described here

B. Immediate surgical intervention without first trying medical management — a plausible alternative that the particular details in this vignette argue against

C. Strict additional dietary fiber restriction as the primary intervention — worth considering, but not the best fit given the constellation of findings presented

D. A structured bowel regimen (eg, scheduled laxatives, adequate hydration, and consideration of the impact of reduced mobility) tailored to his specific needs

E. Enema use alone as the definitive long-term solution without a broader regimen — a genuine competing possibility that remains less well supported by this presentation

143. A child with medical complexity is being discharged home with new durable medical equipment (eg, a wheelchair and a feeding pump). Which of the following is most important for a safe transition home?

A. Coordinate equipment delivery and provide caregiver training on its use prior to or at the time of discharge, confirming equipment is in place and functional

B. Discharge with the equipment ordered but without confirming it has actually arrived at the home before discharge — a consideration that does not fully account for all of the findings described

- C.** Assume the family can independently manage all new equipment without specific training — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Defer all equipment-related planning entirely to the outpatient setting after discharge — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** No specific coordination is needed if the family has used similar equipment previously — a plausible alternative that the particular details in this vignette argue against

144. A child with a neurodevelopmental disability has significant sleep disturbance affecting the whole family. Which of the following is the most appropriate initial approach?

- A.** Sedating medication as the first-line and sole intervention without further assessment — worth considering, but not the best fit given the constellation of findings presented
- B.** A comprehensive assessment of contributing factors (eg, sleep hygiene, environmental factors, pain, and underlying medical issues) before considering pharmacologic options
- C.** No intervention is available for sleep disturbance in this population — a genuine competing possibility that remains less well supported by this presentation
- D.** Ignore the concern since it does not directly affect the child's primary medical condition — a consideration that does not fully account for all of the findings described
- E.** Immediate referral for an overnight sleep study in all cases regardless of the specific concerns raised — clinically plausible in isolation, but this case's specific findings point elsewhere

145. A family of a child with a life-limiting condition is working with the care team to document specific wishes regarding resuscitation and level of intervention across care settings. Which of the following best describes the purpose of a document such as a POLST (Physician/Provider Orders for Life-Sustaining Treatment) form?

- A.** To replace the need for any ongoing conversations between the family and care team about goals of care — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** To serve only as a legal document with no clinical relevance to actual care decisions — a plausible alternative that the particular details in this vignette argue against
- C.** To translate the patient/family's goals of care into actionable medical orders that can be honored consistently across care settings (eg, home, ambulance, hospital)

D. To apply only within a single hospital and not across other care settings — worth considering, but not the best fit given the constellation of findings presented

E. To be completed only once, without any need for review or updates as circumstances change — a genuine competing possibility that remains less well supported by this presentation

146. A family of a child with medical complexity reports significant difficulty finding a dentist willing to see their child due to the complexity of his needs. Which of the following is the most appropriate response from the care team?

A. Assume dental care is not an important priority for this population — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

B. No action is needed since dental care is unrelated to the child's primary medical issues — a reasonable differential consideration, though less consistent with the specific findings described here

C. Assist the family in identifying dental providers experienced with medical complexity (eg, through referral to specialized dental programs), recognizing dental care as an important component of overall health

D. Recommend the family simply continue searching independently without any care team assistance — a plausible alternative that the particular details in this vignette argue against

E. Suggest that dental care be permanently deferred given the difficulty finding an appropriate provider — worth considering, but not the best fit given the constellation of findings presented

147. A family of a child requiring skilled home nursing hours is told that the home nursing agency cannot fully staff the approved hours due to a broader nursing shortage. Which of the following is the most appropriate approach for the care team?

A. Assume the family can independently manage all care needs without any nursing support — a genuine competing possibility that remains less well supported by this presentation

B. Engage in discharge planning that accounts for this gap (eg, exploring additional resources, backup plans, and close follow-up) rather than assuming the approved hours will be reliably available

C. No action is needed since staffing is solely the responsibility of the home nursing agency — a consideration that does not fully account for all of the findings described

D. Delay discharge indefinitely without any further planning or problem-solving — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Discharge as originally planned without modification, assuming the situation will resolve on its own — a reasonable differential consideration, though less consistent with the specific findings described here

148. A child with medical complexity on gastrostomy tube feeds continues to have inadequate weight gain despite feeds that appear to meet estimated caloric needs on paper. Which of the following is the most appropriate next step?

A. Assume the caloric estimate is definitely correct and pursue an unrelated cause without reassessing the feeding plan — a plausible alternative that the particular details in this vignette argue against

B. Increase the feeding volume substantially without reassessing tolerance or the accuracy of the current plan — worth considering, but not the best fit given the constellation of findings presented

C. Reassess the adequacy of the current feeding plan (including actual delivered volume, tolerance, and losses) and adjust as needed, since actual intake and needs may differ from initial estimates

D. Switch to an entirely different feeding route without first reassessing the current regimen — a genuine competing possibility that remains less well supported by this presentation

E. No further action is needed if the caloric calculation appears correct on paper — a consideration that does not fully account for all of the findings described

149. A child with epilepsy and a history of prolonged seizures is being discharged home. Which of the following is most important to ensure prior to discharge?

A. A clear, individualized seizure action plan including recognition of prolonged seizures and appropriate use of a home rescue medication, with caregiver education prior to discharge

B. Rely on the family calling emergency services for every seizure of any duration, without a specific home rescue plan — clinically plausible in isolation, but this case's specific findings point elsewhere

C. No specific home seizure plan is needed if the child is on daily antiepileptic medication — a reasonable differential consideration, though less consistent with the specific findings described here

D. Defer seizure action planning entirely to the outpatient neurology visit after discharge — a plausible alternative that the particular details in this vignette argue against

E. Provide rescue medication without any specific instructions on when or how to use it — worth considering, but not the best fit given the constellation of findings presented

150. A family of a child with medical complexity mentions that his healthy sibling has been showing signs of stress and difficulty coping with the amount of attention directed toward the ill child's care. Which of the following is the most appropriate response from the care team?

A. Focus exclusively on the ill child's needs, since the sibling is not the patient — a genuine competing possibility that remains less well supported by this presentation

B. Advise the family that this is an unavoidable and unaddressable consequence of having a child with medical complexity — a consideration that does not fully account for all of the findings described

C. Acknowledge the impact on the sibling and connect the family with relevant support resources (eg, sibling support programs, counseling) as part of a family-centered approach to care

D. Suggest the sibling be excluded from family discussions about the ill child's care entirely — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Refer the sibling for care elsewhere with no coordination or follow-up from the current team — a reasonable differential consideration, though less consistent with the specific findings described here

151. A hospitalist is placing an umbilical venous catheter in a critically ill newborn. Which of the following is most important to confirm before using the line for medication administration?

A. The catheter's external length alone, without confirming internal tip position by imaging — a plausible alternative that the particular details in this vignette argue against

B. That the catheter was inserted on the first attempt, regardless of confirmed position — worth considering, but not the best fit given the constellation of findings presented

C. Appropriate catheter tip position confirmed by imaging, since a malpositioned line increases the risk of serious complications with infusions

D. Only that blood can be aspirated from the line, without further position confirmation — a genuine competing possibility that remains less well supported by this presentation

E. No specific position confirmation is needed if the catheter advanced without resistance — a consideration that does not fully account for all of the findings described

152. A hospitalist is performing bladder catheterization on a young female infant to obtain a urine specimen. Which of the following is most important to reduce the risk of a false-positive culture result from this procedure?

A. Careful sterile technique with appropriate cleansing of the area before catheter insertion to minimize contamination

B. Speed of the procedure alone, regardless of technique used

C. Using the same catheter multiple times across different patients to save supplies

D. Catheterization technique does not affect culture contamination risk in any way

E. Performing the procedure without any cleansing step, since this does not affect results

153. A hospitalist is preparing to perform arthrocentesis on a swollen knee joint concerning for septic arthritis. Which of the following is most important prior to the procedure?

A. Assessment of the patient's coagulation status and confirmation there is no overlying skin infection at the planned needle insertion site

B. No specific pre-procedure assessment is needed for this joint aspiration

C. Administering antibiotics immediately before the procedure regardless of the need to first obtain a diagnostic sample

D. Proceeding regardless of any overlying skin infection, since this does not affect the procedure

E. Sedation is mandatory for every arthrocentesis regardless of patient age or cooperation

154. A hospitalist is obtaining consent for a skin biopsy to evaluate a concerning rash. Which of the following is most important to include in this discussion?

A. Only the cosmetic outcome of the biopsy site needs to be discussed — clinically plausible in isolation, but this case's specific findings point elsewhere

B. No discussion of risks is needed since skin biopsy is considered a minor procedure — a reasonable differential consideration, though less consistent with the specific findings described here

- C.** Only the cost of the procedure needs to be addressed — a plausible alternative that the particular details in this vignette argue against
- D.** The indication for the biopsy, the procedure itself, associated risks (eg, bleeding, infection, scarring), and expected use of the results to guide diagnosis and management
- E.** Only the time required to obtain results needs to be discussed — worth considering, but not the best fit given the constellation of findings presented

155. A hospitalist is having difficulty obtaining peripheral IV access in a child with chronically difficult access due to multiple prior hospitalizations. Which of the following is the most appropriate approach after failed attempts?

- A.** Continue unlimited peripheral attempts at the same sites indefinitely without considering alternative approaches — a genuine competing possibility that remains less well supported by this presentation
- B.** Proceed directly to a surgical central line placement without considering other options first — a consideration that does not fully account for all of the findings described
- C.** Delay all needed IV therapy indefinitely until access is somehow obtained — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Consider additional tools/approaches (eg, ultrasound-guided IV placement, involving a specialized vascular access team, or intraosseous access if urgent) after a reasonable number of failed attempts
- E.** Use an inappropriately small catheter in an inappropriate vein simply to achieve access at any cost — a reasonable differential consideration, though less consistent with the specific findings described here

156. A hospitalist is considering myringotomy/tympanocentesis for a child with recurrent acute otitis media episodes. Which of the following is most important to discuss with the family regarding this procedure?

- A.** Only the appearance of the ear afterward needs to be discussed — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- B.** No discussion of risks or alternatives is needed since the procedure is considered routine — a genuine competing possibility that remains less well supported by this presentation

C. The indication (eg, diagnostic or therapeutic purpose), risks, benefits, and alternatives (such as continued medical management or tympanostomy tube placement) as part of informed decision-making

D. Only the cost of the procedure needs to be addressed — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Only the expected duration of the procedure itself needs to be discussed — a reasonable differential consideration, though less consistent with the specific findings described here

157. A hospitalist is discussing sensitive health information with a 16-year-old during a hospitalization. Which of the following is the most appropriate approach regarding the presence of the parent during parts of this discussion?

A. Always require the parent to be present for every part of every discussion regardless of the adolescent's preference or the sensitivity of the topic — a plausible alternative that the particular details in this vignette argue against

B. Always exclude the parent from every discussion regardless of the adolescent's preference or legal considerations — worth considering, but not the best fit given the constellation of findings presented

C. Offer the adolescent an opportunity to discuss certain sensitive topics privately, as appropriate given the specific topic, applicable confidentiality protections, and the adolescent's developmental stage

D. Decide unilaterally without involving the adolescent's preference in any way — a genuine competing possibility that remains less well supported by this presentation

E. Refer the decision about parental presence entirely to hospital administration — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

158. A family and the medical team disagree about an aspect of the care plan, leading to escalating tension during rounds. Which of the following is the most appropriate approach to this conflict?

A. End the conversation immediately without further attempts at resolution — a reasonable differential consideration, though less consistent with the specific findings described here — a plausible alternative that the particular details in this vignette argue against

- B.** Use active listening, acknowledge the family's concerns, and work collaboratively toward a mutually acceptable resolution, involving additional support (eg, palliative care, ethics consultation) if needed for persistent disagreement
- C.** Proceed with the team's original plan without further discussion of the family's concerns — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation
- D.** Ask the family to leave the unit until they agree with the plan — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- E.** Avoid any further engagement with the family on this topic going forward — a reasonable differential consideration, though less consistent with the specific findings described here — a plausible alternative that the particular details in this vignette argue against

159. A hospital is working to improve the quality of its written discharge summaries/after-visit summaries provided to families. Which of the following is most important for these documents to achieve their intended purpose?

- A.** Clear, accurate, and appropriately detailed information written in accessible language, including diagnoses, medications, follow-up needs, and warning signs to watch for
- B.** Documents should be as long and comprehensive as possible regardless of readability — worth considering, but not the best fit given the constellation of findings presented
- C.** Documents should use precise medical terminology throughout to ensure clinical accuracy, regardless of the family's health literacy — a genuine competing possibility that remains less well supported by this presentation
- D.** Documents are not an important component of discharge communication as long as verbal instructions were given — a consideration that does not fully account for all of the findings described
- E.** Documents should omit warning signs to avoid alarming the family — clinically plausible in isolation, but this case's specific findings point elsewhere

160. A family requests that additional extended family members be included in care discussions and decision-making, consistent with their family's cultural and personal preferences. Which of the following is the most appropriate approach?

- A.** Decline the request and limit discussions strictly to legal parents/guardians only, regardless of family preference — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Accommodate the family's preference where feasible and appropriate, recognizing that family structures and decision-making practices vary and are an important aspect of patient- and family-centered care
- C.** Ignore the request without any discussion of the family's reasoning — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- D.** Require the family to justify their request in detail before any accommodation is considered — a genuine competing possibility that remains less well supported by this presentation
- E.** Automatically exclude any individuals who are not the child's legal guardians from all discussions — a consideration that does not fully account for all of the findings described

161. A hospitalized patient is being transitioned from primary hospitalist management to a subspecialist taking over as the primary team mid-hospitalization for a complex issue. Which of the following is most important for this transition?

- A.** No specific handoff is needed since the subspecialist has already been following the patient in a consulting role — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** A transition can occur silently, with the change reflected only in the written orders — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** The family does not need to be informed of this change in the primary team — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- D.** Transition of care responsibility can occur without any direct communication between the two teams — a genuine competing possibility that remains less well supported by this presentation
- E.** A clear, structured handoff between the hospitalist and subspecialist team covering the clinical course, current status, and outstanding issues, with clear communication to the family about the change in primary team

162. A family wishes to take their child home against medical advice despite the team's recommendation for continued inpatient care. Which of the following is the most appropriate approach?

- A.** Physically prevent the family from leaving the hospital under any circumstances — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** Simply allow the family to leave without any further discussion or documentation — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** Refuse to provide any further care instructions if the family proceeds with discharge against medical advice — a plausible alternative that the particular details in this vignette argue against
- D.** Contact law enforcement immediately as the first response to this situation in all cases — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation
- E.** Engage in a thorough discussion of the risks and benefits of the recommended plan versus leaving, clearly document the discussion, and provide the safest possible instructions and follow-up plan given the family's decision

163. A hospital implements a program of follow-up phone calls to families shortly after discharge for a condition associated with high readmission risk. Which of the following best describes the primary purpose of this program?

- A.** To replace the need for a scheduled outpatient follow-up visit entirely — a consideration that does not fully account for all of the findings described
- B.** To proactively identify early warning signs, answer questions, and reinforce discharge instructions, with the goal of catching and addressing problems before they progress to a readmission
- C.** To assess only patient satisfaction, without addressing clinical concerns — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** To assign blame if a readmission subsequently occurs — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** To collect data for billing purposes only, without any clinical benefit — a plausible alternative that the particular details in this vignette argue against

164. A child is being discharged after a hospitalization for a new diagnosis requiring ongoing outpatient management. Which of the following is most important regarding communication with the child's primary care provider?

- A.** Timely communication with the primary care provider, including a summary of the hospitalization, new diagnoses, medication changes, and follow-up needs, to support continuity of care
- B.** No communication with the primary care provider is needed if the family has been given a written discharge summary — worth considering, but not the best fit given the constellation of findings presented
- C.** Communication with the primary care provider should be limited only to insurance-related administrative details — a genuine competing possibility that remains less well supported by this presentation
- D.** Communication with the primary care provider can be deferred indefinitely if a subspecialist is also following the patient — a consideration that does not fully account for all of the findings described
- E.** The family alone is responsible for relaying all relevant information to the primary care provider — clinically plausible in isolation, but this case's specific findings point elsewhere

165. A hospital implements a standardized checklist for central line insertion to reduce bloodstream infections. Which of the following best describes why a checklist-based approach is effective for this type of intervention?

- A.** Checklists work primarily by assigning individual blame when a step is missed — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Checklists are effective only for administrative tasks, not clinical procedures — a plausible alternative that the particular details in this vignette argue against
- C.** Checklists help ensure consistent adherence to evidence-based steps, reducing reliance on memory alone and decreasing the risk that a critical step is inadvertently omitted
- D.** Checklists eliminate the need for clinical judgment entirely during the procedure — worth considering, but not the best fit given the constellation of findings presented
- E.** Checklists are primarily useful for billing documentation rather than patient safety — a genuine competing possibility that remains less well supported by this presentation

166. A hospital wants to reduce diagnostic errors (eg, missed or delayed diagnoses). Which of the following best reflects an evidence-informed approach to this goal?

- A.** Focus solely on disciplining individual clinicians after a diagnostic error is identified — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** Assume diagnostic errors are not a meaningful patient safety concern compared with other error types — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** Rely exclusively on more advanced testing for every patient regardless of clinical presentation — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- D.** Combine strategies such as structured clinical reasoning approaches, systems supports (eg, decision support tools), and a culture that encourages diagnostic reconsideration when a patient's course doesn't fit the working diagnosis
- E.** Address diagnostic errors only after a specific adverse outcome has occurred, with no proactive strategy — a genuine competing possibility that remains less well supported by this presentation

167. A hospital is designing a quality improvement project aimed at safely reducing length of stay for a specific condition. Which of the following is most important to include alongside the length-of-stay measure itself?

- A.** A balancing measure (such as readmission rate) to ensure that reducing length of stay does not come at the cost of premature or unsafe discharge
- B.** No other measures are needed beyond tracking length of stay itself — a consideration that does not fully account for all of the findings described
- C.** Only patient satisfaction scores, without any other outcome measure — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Only financial metrics, without any clinical outcome measure — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** Only physician satisfaction with the new process, without any patient-level outcome measure — a plausible alternative that the particular details in this vignette argue against

168. A hospital tracks compliance with a sepsis care bundle (eg, timely blood cultures, fluids, and antibiotics) as part of a quality improvement initiative. Which of the following best describes the purpose of bundle compliance monitoring?

- A.** To identify individual clinicians for punitive action when a bundle element is missed — worth considering, but not the best fit given the constellation of findings presented
- B.** To ensure reliable, consistent delivery of evidence-based sepsis care elements, which together have been associated with improved outcomes when performed together and in a timely manner
- C.** To replace clinical judgment entirely in the management of septic patients — a genuine competing possibility that remains less well supported by this presentation
- D.** To satisfy a purely administrative requirement with no connection to patient outcomes — a consideration that does not fully account for all of the findings described
- E.** To determine hospital reimbursement rates, with no other purpose relevant to patient care — clinically plausible in isolation, but this case's specific findings point elsewhere

169. Clinical staff report that they are increasingly ignoring electronic health record alerts due to the sheer volume of alerts received, including many perceived as low-value. Which of the following best describes this phenomenon and an appropriate response?

- A.** This describes alert fatigue; an appropriate response involves refining alerts to improve their clinical relevance and reduce low-value interruptions, helping preserve attention for the alerts that matter most
- B.** The solution is to increase the number of alerts further to ensure nothing is missed — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** Staff should be disciplined individually for not responding to every alert — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- D.** This is not a meaningful patient safety concern and requires no specific attention — a genuine competing possibility that remains less well supported by this presentation
- E.** Alerts should be eliminated entirely from the electronic health record — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

170. A hospital implements a two-identifier verification process (eg, name and date of birth) before medication administration and procedures. Which of the following best describes the purpose of this practice?

- A.** To satisfy a purely administrative requirement unrelated to patient safety — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** To reduce the risk of wrong-patient errors by ensuring the correct patient is definitively identified before a clinical action is taken
- C.** To slow down clinical workflow without any specific safety benefit — a plausible alternative that the particular details in this vignette argue against
- D.** To replace the need for any other patient safety practices — worth considering, but not the best fit given the constellation of findings presented
- E.** To assign blame if an error occurs despite the verification process — a genuine competing possibility that remains less well supported by this presentation

171. A hospital wants to improve family comprehension of discharge instructions. Which of the following best reflects an evidence-informed quality improvement approach to this goal?

- A.** Incorporate teach-back techniques into the discharge process, along with plain-language materials, and measure comprehension as part of the improvement effort
- B.** Assume comprehension is already adequate without any measurement of understanding — a consideration that does not fully account for all of the findings described
- C.** Simply provide the same written materials in a larger font size, with no other changes — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Rely solely on the family signing a form acknowledging receipt of instructions, without assessing actual understanding — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** Provide instructions only verbally, with no written materials at all — a plausible alternative that the particular details in this vignette argue against

172. A hospital establishes specific criteria for when a rapid response team should be activated for a deteriorating patient. Which of the following best describes the purpose of having clear, specific activation criteria?

- A.** To help ensure early, consistent recognition and response to clinical deterioration, reducing reliance on individual judgment alone about when to escalate care
- B.** To limit rapid response team activation to only the most severe, already-critical presentations — worth considering, but not the best fit given the constellation of findings presented

- C.** To replace the need for any bedside clinical assessment — a genuine competing possibility that remains less well supported by this presentation
- D.** To ensure rapid response activation occurs only after a cardiac or respiratory arrest has already begun — a consideration that does not fully account for all of the findings described
- E.** To assign blame to bedside staff when deterioration occurs despite activation criteria being met — clinically plausible in isolation, but this case's specific findings point elsewhere

173. A hospitalist is deciding whether to order daily repeat basic metabolic panels for a clinically stable, improving patient with no specific ongoing concern for electrolyte abnormality. Which of the following best reflects a high-value care approach?

- A.** Continue daily labs regardless of clinical trajectory to avoid any possibility of missing a change — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Increase lab frequency further as a precaution for all stable patients — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- C.** Base lab frequency solely on unit routine and habit rather than clinical need — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described
- D.** Order additional unrelated labs at the same time simply because blood is already being drawn — clinically plausible in isolation, but this case's specific findings point elsewhere
- E.** Reduce lab frequency to align with actual clinical need for a stable, improving patient without a specific ongoing indication, since routine repeat testing without indication adds cost and discomfort without a clear benefit

174. Which of the following best describes the concept of 'pretest probability' in clinical decision-making?

- A.** The proportion of patients with disease who test positive on a specific test — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** The estimated likelihood that a patient has a given condition before a specific test result is known, based on factors such as clinical presentation and prevalence

- C.** The proportion of patients without disease who test negative on a specific test — a plausible alternative that the particular details in this vignette argue against
- D.** The overall accuracy of a test across all patients tested, regardless of prevalence — worth considering, but not the best fit given the constellation of findings presented
- E.** A measure used only in research settings with no role in individual clinical decision-making — a genuine competing possibility that remains less well supported by this presentation

175. Which of the following best describes 'number needed to harm' (NNH) in the context of evaluating a therapy's risk?

- A.** The number of patients who must be treated for one additional patient to benefit from the therapy — a consideration that does not fully account for all of the findings described
- B.** The number of years of exposure required before any adverse effect can occur — clinically plausible in isolation, but this case's specific findings point elsewhere
- C.** The total number of adverse events observed in a clinical trial overall — a reasonable differential consideration, though less consistent with the specific findings described here
- D.** The number of patients who would need to receive a treatment for one additional patient to experience a specific adverse effect, compared with not receiving the treatment
- E.** The number of patients enrolled in the safety arm of a clinical trial — a plausible alternative that the particular details in this vignette argue against

176. A hospitalist notices a pattern of ordering a specific test or treatment more often than is supported by current evidence for a given clinical scenario. Which of the following best describes this pattern, and what is an appropriate response?

- A.** This reflects appropriately thorough care and requires no reconsideration — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation
- B.** This describes overuse/overtreatment; addressing it involves reviewing the evidence, providing feedback and education, and considering systems-level interventions (eg, clinical decision support) to better align practice with evidence
- C.** This pattern should be ignored unless it results in a specific adverse patient outcome — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

D. This is best addressed by increasing use of the test or treatment further to be maximally thorough — a reasonable differential consideration, though less consistent with the specific findings described here

E. This should be addressed only through punitive measures directed at individual clinicians — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented

177. A study reports a treatment effect with a 95% confidence interval that does not cross the point of no effect. Which of the following best describes the appropriate interpretation of this confidence interval?

A. It indicates that exactly 95% of future patients will experience this precise effect — a genuine competing possibility that remains less well supported by this presentation

B. It provides a range of values within which the true effect size is likely to lie, given the observed data and a specified level of confidence, and here it excludes the possibility of no effect

C. It indicates the probability that the null hypothesis is true — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere

D. It indicates the treatment is completely free of any adverse effects — a reasonable differential consideration, though less consistent with the specific findings described here

E. It replaces the need for a p-value with no additional interpretive value — a plausible alternative that the particular details in this vignette argue against

178. A hospital administrator asks a hospitalist to help evaluate whether a new expensive intervention provides good value relative to its cost and clinical benefit. Which of the following best describes the type of analysis best suited to this specific question?

A. A study assessing only clinical efficacy, without considering cost at all

B. A study assessing only cost, without considering clinical outcomes at all

C. A case report describing a single patient's outcome with the intervention

D. A cost-effectiveness analysis, which explicitly weighs the clinical benefit gained against the cost of an intervention

E. A patient satisfaction survey alone, without considering cost or clinical outcomes

179. A screening program appears to improve survival time from diagnosis to death for a condition, but overall mortality from the condition in the population has not changed. Which of the following best explains this discrepancy?

- A.** Recall bias, which relates to participant memory of past exposures rather than the timing of diagnosis relative to disease course
- B.** Confounding by indication, which relates to why a treatment was given rather than the timing of diagnosis
- C.** Publication bias, which relates to which studies get published rather than this specific screening phenomenon
- D.** Lead-time bias, in which earlier diagnosis appears to extend survival time from diagnosis without actually delaying death or improving true outcomes
- E.** Measurement bias, which relates to how a variable is measured rather than the timing of diagnosis relative to the disease course

180. A hospitalist notices that a patient who is tolerating oral intake well continues to receive maintenance IV fluids out of habit, without a specific ongoing indication. Which of the following best reflects a high-value care approach?

- A.** Discontinue unnecessary maintenance IV fluids once oral intake is adequately tolerated, since continued IV fluids without a specific indication add cost, discomfort, and potential complications without a corresponding benefit
- B.** Increase the IV fluid rate further as an additional precaution — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation
- C.** Base the decision solely on nursing convenience rather than clinical necessity — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Apply the same IV fluid duration to every patient regardless of oral intake status — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** Continue IV fluids indefinitely regardless of oral tolerance, to avoid any possibility of dehydration — a plausible alternative that the particular details in this vignette argue against

181. A clinical practice guideline is developed by a panel that includes several members with substantial financial relationships with a company that manufactures a treatment recommended in the guideline, without transparent disclosure of these relationships. Which of the following best describes the primary concern with this guideline?

- A.** This is not a meaningful concern as long as the recommendations are based on some published evidence — worth considering, but not the best fit given the constellation of findings presented
- B.** Undisclosed conflicts of interest among the panel members raise concern about potential bias in the guideline's recommendations, undermining confidence in its trustworthiness
- C.** Financial relationships are irrelevant to guideline quality as long as panel members are experts in the field — a genuine competing possibility that remains less well supported by this presentation
- D.** This concern applies only if the guideline explicitly states it was funded by the company — a consideration that does not fully account for all of the findings described
- E.** This is a concern only if the treatment in question is later shown to be ineffective — clinically plausible in isolation, but this case's specific findings point elsewhere

182. A hospitalist reviews a series of case reports describing patients who did well after receiving an unproven therapy, and concludes the therapy is likely effective, without considering patients who received the therapy and did not survive or were not reported. Which of the following best describes the bias affecting this conclusion?

- A.** Survivorship bias, in which conclusions are drawn only from those who survived or had a visible outcome, without considering those who did not
- B.** Confounding by indication, which relates to why a treatment was given rather than which outcomes are visible for review
- C.** Lead-time bias, which relates to the timing of diagnosis rather than which outcomes are visible for review
- D.** Measurement bias, which relates to how a variable is measured rather than which outcomes are available for review
- E.** Recall bias, which relates to participant memory rather than which outcomes get reported or noticed

183. A hospitalist notices that after-hours interpreter access is inconsistent, leading to delays in care for families with limited English proficiency overnight. Which of the following is the most appropriate advocacy-oriented response?

- A.** Accept the limitation as an unavoidable constraint of overnight staffing — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Address only individual cases as they arise, without considering the broader systemic pattern — a plausible alternative that the particular details in this vignette argue against
- C.** Assume families will manage using informal interpretation from staff or family members as a permanent solution — worth considering, but not the best fit given the constellation of findings presented
- D.** Advocate for a hospital-wide policy ensuring reliable after-hours interpreter access (eg, via video or phone interpretation services), given the identified systemic gap
- E.** Take no action since this falls outside the scope of clinical responsibilities — a genuine competing possibility that remains less well supported by this presentation

184. A senior hospitalist is asked to support the professional development of a newer colleague who has expressed interest in eventually taking on a leadership role. Which of the following best reflects an effective approach to this mentorship and succession planning?

- A.** Provide no specific guidance, assuming leadership skills will develop naturally over time without support — a consideration that does not fully account for all of the findings described
- B.** Provide structured mentorship, including graduated leadership opportunities, honest feedback, and support tailored to the colleague's specific goals and development needs
- C.** Assign the colleague to a leadership role immediately without any preparation or support — clinically plausible in isolation, but this case's specific findings point elsewhere
- D.** Focus exclusively on clinical skills, without addressing leadership or career development goals — a reasonable differential consideration, though less consistent with the specific findings described here
- E.** Discourage the colleague's interest in leadership without further discussion — a plausible alternative that the particular details in this vignette argue against

185. A hospitalist reviewing a commonly used clinical risk calculator notices that it includes a race-based adjustment that has been increasingly questioned in the medical literature for its scientific basis

and potential to affect care recommendations differently across patient groups. Which of the following is the most appropriate response?

- A.** Stay informed about evolving evidence and professional society guidance regarding race-based adjustments in clinical tools, and apply updated, evidence-based versions of such tools as they become available
- B.** Continue using the tool exactly as originally designed indefinitely, regardless of updated evidence or guidance — worth considering, but not the best fit given the constellation of findings presented
- C.** Discontinue use of all clinical risk calculators entirely, regardless of their evidence base — a genuine competing possibility that remains less well supported by this presentation
- D.** Assume any race-based variable in a clinical tool is automatically invalid without reviewing the specific evidence and guidance involved — a consideration that does not fully account for all of the findings described
- E.** Make an individual, ad hoc decision to disregard the tool without following updated institutional or professional guidance — clinically plausible in isolation, but this case's specific findings point elsewhere

186. A hospital wants to address a recurring pattern of preventable pediatric injuries in the community it serves. Which of the following best reflects an effective population health advocacy approach?

- A.** Take no action, since injury prevention is considered outside the hospital's role — a reasonable differential consideration, though less consistent with the specific findings described here
- B.** Address the issue only within individual clinical encounters, without any broader community engagement — a plausible alternative that the particular details in this vignette argue against
- C.** Assume the pattern is unrelated to any modifiable community-level factors — worth considering, but not the best fit given the constellation of findings presented
- D.** Partner with community organizations and public health resources to develop and support prevention initiatives targeting the specific identified injury pattern
- E.** Wait for the community to independently identify and address the pattern without hospital involvement — a genuine competing possibility that remains less well supported by this presentation

187. A family of a child with a terminal condition and no reasonable expectation of recovery is considering withdrawing life-sustaining treatment after extensive discussion with the care team. Which of the following best reflects the ethical framework supporting this decision?

- A.** Withdrawing life-sustaining treatment is never ethically permissible under any circumstances — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- B.** This decision can only be made unilaterally by the medical team, without family involvement — a reasonable differential consideration, though less consistent with the specific findings described here
- C.** When a shared decision-making process concludes that continued treatment no longer aligns with the child's best interests or the family's informed goals of care, withdrawing life-sustaining treatment can be an ethically appropriate choice
- D.** This decision requires court approval in all cases, regardless of family and team agreement — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- E.** Withdrawing treatment is only appropriate if explicitly requested by the child, regardless of age or developmental capacity — a genuine competing possibility that remains less well supported by this presentation

188. Two parents with joint legal decision-making authority for their hospitalized child disagree about a significant treatment decision. Which of the following is the most appropriate approach for the care team?

- A.** Automatically follow the wishes of whichever parent is present at the hospital at a given time — a consideration that does not fully account for all of the findings described
- B.** Proceed with the medical team's preferred plan, disregarding the disagreement entirely — clinically plausible in isolation, but this case's specific findings point elsewhere
- C.** Refuse to provide any care until the disagreement is fully resolved, regardless of clinical urgency — a reasonable differential consideration, though less consistent with the specific findings described here
- D.** Facilitate further discussion between the parents (and involve additional support such as ethics consultation or social work if needed), while addressing any time-sensitive clinical needs appropriately in the interim

E. Allow the child, regardless of age, to make the final decision to resolve the disagreement — a plausible alternative that the particular details in this vignette argue against

189. A 10-year-old with a serious chronic illness asks direct questions about his diagnosis and prognosis. Which of the following best reflects an appropriate approach to communicating with him about this information?

- A. Provide honest, developmentally appropriate information tailored to his level of understanding, in coordination with the family regarding how and when to share specific details
- B. Avoid providing any information directly to the child under any circumstances, regardless of his questions or developmental level — worth considering, but not the best fit given the constellation of findings presented
- C. Provide the same level of detail and language used with adults, regardless of his developmental stage — a genuine competing possibility that remains less well supported by this presentation
- D. Defer all questions to the family without any input from the child's own questions or concerns — a consideration that does not fully account for all of the findings described
- E. Provide false reassurance to avoid causing distress, regardless of the child's questions — clinically plausible in isolation, but this case's specific findings point elsewhere

190. A hospitalist is asked by a patient's family to connect on a personal social media account after discharge. Which of the following best reflects an appropriate approach to this request?

- A. Accept all such requests immediately to maintain a positive relationship with families — a reasonable differential consideration, though less consistent with the specific findings described here
- B. Accept the request only if the family insists repeatedly — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- C. Share personal contact information freely with any family who asks — a genuine competing possibility that remains less well supported by this presentation
- D. Base the decision solely on how much the hospitalist personally likes the specific family — a consideration that does not fully account for all of the findings described

E. Decline personal social media connections with patients' families, maintaining appropriate professional boundaries, while directing ongoing communication through appropriate clinical channels

191. A hospitalist is teaching a resident at the bedside during rounds. Which of the following best reflects an effective bedside teaching technique?

- A. Discuss the patient's case only afterward, away from the bedside, to avoid any patient or family involvement — clinically plausible in isolation, but this case's specific findings point elsewhere
- B. Use only closed-ended questions that require a single correct answer, without further discussion — a reasonable differential consideration, though less consistent with the specific findings described here
- C. Focus exclusively on physical exam findings, without connecting them to the broader clinical reasoning process — a plausible alternative that the particular details in this vignette argue against
- D. Use focused, targeted teaching points tied directly to the patient in front of you, engaging the learner with questions that promote clinical reasoning while remaining mindful of the patient's and family's experience
- E. Avoid any teaching at the bedside, reserving all teaching for conference settings — worth considering, but not the best fit given the constellation of findings presented — a genuine competing possibility that remains less well supported by this presentation

192. A residency program wants to strengthen professionalism among trainees. Which of the following best reflects an effective approach to teaching this competency?

- A. Rely solely on a single lecture on professionalism early in training, with no further reinforcement — a consideration that does not fully account for all of the findings described
- B. Assume professionalism cannot be taught and will develop entirely on its own — clinically plausible in isolation, but this case's specific findings point elsewhere
- C. Focus exclusively on formal written policies, without further reinforcement — a reasonable differential consideration, though less consistent with the specific findings described here
- D. Address professionalism only when a significant lapse has already occurred — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented

E. Combine explicit teaching with consistent role modeling by faculty and ongoing feedback, since observed behavior of supervising physicians strongly influences trainees' developing professional identity

193. A residency program is implementing an entrustable professional activities (EPA) framework to guide resident supervision decisions. Which of the following best describes the purpose of this framework?

- A. To assign supervision levels based solely on a resident's year of training, without any individualized assessment — a genuine competing possibility that remains less well supported by this presentation
- B. To eliminate the need for direct supervision entirely once a resident reaches a certain training year — a consideration that does not fully account for all of the findings described
- C. To replace all other forms of assessment in the training program — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here
- D. To determine only the resident's final grade at the end of the rotation — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- E. To define specific clinical activities that can be entrusted to a trainee at a defined level of supervision based on demonstrated competence, guiding individualized, competency-based supervision decisions

194. A hospitalist is teaching residents how to give an effective patient handoff. Which of the following best reflects an effective approach to teaching this skill?

- A. Use a structured framework, direct observation with feedback, and practice opportunities, since handoff communication is a learnable skill with well-described best practices
- B. Assume handoff skills will develop automatically with clinical experience alone, without any specific instruction — a genuine competing possibility that remains less well supported by this presentation
- C. Teach handoff skills through a single written document, without any observation or practice component — a consideration that does not fully account for all of the findings described

D. Focus exclusively on the content of the handoff, without addressing communication structure or teamwork aspects — clinically plausible in isolation, but this case's specific findings point elsewhere

E. Avoid providing feedback on handoff performance to prevent discouraging trainees — a reasonable differential consideration, though less consistent with the specific findings described here

195. A researcher wants to study whether a specific exposure in infancy is associated with a later health outcome by identifying a group of exposed and unexposed infants and following them forward over time. Which of the following study designs best fits this approach?

A. A case-control study, which looks backward from outcome status rather than following exposure groups forward over time

B. A cross-sectional study, which assesses exposure and outcome at a single point in time rather than following groups forward

C. A prospective cohort study, the best-supported explanation given the findings described, which best explains the full combination of findings described in this vignette

D. A systematic review, which synthesizes existing studies rather than serving as this type of primary study design

E. A case series, which describes a group of affected patients without a comparison group followed prospectively from exposure

196. In a randomized controlled trial, some participants assigned to the treatment group did not actually receive the full treatment as intended, but researchers analyze outcomes according to each participant's originally assigned group. Which of the following best describes this analytic approach?

A. Per-protocol analysis, which would instead analyze only those who received treatment as intended, not according to original assignment

B. As-treated analysis, which would group participants according to the treatment they actually received rather than their original assignment

C. Subgroup analysis, which examines specific patient subgroups rather than analyzing by original assignment overall

D. Sensitivity analysis, which tests how results change under different assumptions rather than describing this specific analytic approach

E. Intention-to-treat analysis, the diagnosis most consistent with the clinical picture presented here, supported by the specific combination of findings in this case

197. A large clinical trial finds a statistically significant difference between two treatments, but the actual magnitude of the difference in outcomes is very small and unlikely to be noticeable to patients. Which of the following best describes this situation?

- A. The result cannot be statistically significant if the effect size is small, so this scenario is not possible — a plausible alternative that the particular details in this vignette argue against
- B. Statistical significance and clinical significance are always equivalent, so no distinction is needed here — worth considering, but not the best fit given the constellation of findings presented
- C. This illustrates the distinction between statistical significance (an effect unlikely to be due to chance, more easily achieved in large studies) and clinical significance (whether the effect size is meaningful to patients)
- D. This finding indicates a flaw in the study's randomization process — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described
- E. This finding should be dismissed entirely as clinically irrelevant without any further consideration of the effect size or context — clinically plausible in isolation, but this case's specific findings point elsewhere

198. A prominent research finding fails to be confirmed when other independent research groups attempt to reproduce the study using similar methods. Which of the following best describes the importance of this situation for scientific evidence?

- A. A single study, regardless of prominence, should always be considered definitive on its own without further confirmation — a reasonable differential consideration, though less consistent with the specific findings described here
- B. Failure to replicate a finding is never scientifically meaningful and should be disregarded — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented
- C. Replication is only relevant for basic science research, not clinical research — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described

D. Reproducibility (the ability of independent researchers to obtain similar results using similar methods) is an important component of establishing confidence in a scientific finding, and failure to replicate raises important questions about the original finding's validity

E. This situation indicates that the original researchers definitely committed research misconduct — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here

199. A research study poses minimal risk to participants and involves only the analysis of already-collected, de-identified data. Which of the following best reflects appropriate ethical oversight for this type of study?

A. No institutional review board oversight is ever required for any research, regardless of risk level, at the investigator's sole discretion — a plausible alternative that the particular details in this vignette argue against

B. Full board review is always required regardless of the minimal risk level and de-identified nature of the data — worth considering, but not the best fit given the constellation of findings presented

C. Individual participant consent must always be obtained in this scenario, with no possibility of a waiver — a genuine competing possibility that remains less well supported by this presentation — a consideration that does not fully account for all of the findings described

D. Such minimal-risk studies may be eligible for an expedited review process or a waiver of certain requirements (such as individual consent), consistent with applicable regulations, though appropriate IRB oversight and determination remain necessary

E. Ethical oversight is unnecessary once data have been de-identified, regardless of applicable regulations — clinically plausible in isolation, but this case's specific findings point elsewhere — a reasonable differential consideration, though less consistent with the specific findings described here

200. Two researchers on a collaborative project disagree about the order of authorship on a resulting manuscript, with each believing their contribution warrants a more prominent position. Which of the following is the most appropriate approach to resolving this disagreement?

A. Authorship order should be determined solely by seniority, regardless of actual contribution to the work — a plausible alternative that the particular details in this vignette argue against — worth considering, but not the best fit given the constellation of findings presented

- B.** The disagreement should be ignored, with authorship order decided arbitrarily by whoever submits the manuscript — a genuine competing possibility that remains less well supported by this presentation
- C.** Discuss the disagreement openly among the involved researchers, applying established authorship criteria (eg, based on relative contributions to the work) and, if needed, involving a mentor or institutional resource to help resolve the dispute
- D.** Authorship order is not an important consideration and should be decided randomly — a consideration that does not fully account for all of the findings described — clinically plausible in isolation, but this case's specific findings point elsewhere
- E.** The researcher with the most publications overall should automatically receive top authorship regardless of contribution to this specific project — a reasonable differential consideration, though less consistent with the specific findings described here

Answers

- 1. E.** Daily headaches with papilledema, a normal MRI, and elevated CSF opening pressure with normal composition are classic for idiopathic intracranial hypertension (pseudotumor cerebri), distinguished from structural causes (tumor, cavernous sinus thrombosis) by the normal imaging and from migraine by the objective papilledema and elevated opening pressure.
- 2. B.** Multiple café-au-lait macules, axillary freckling, and neurofibromas together meet clinical diagnostic criteria for neurofibromatosis type 1, distinguished from Legius syndrome (café-au-lait macules without neurofibromas) and McCune-Albright syndrome (different-bordered macules with endocrine features).
- 3. C.** Progressive urinary incontinence, lower extremity weakness, a sacral dimple with a hairy patch, and a low-lying, tethered conus medullaris on MRI together are classic for tethered cord syndrome (occult spinal dysraphism), a congenital, progressive condition distinguished from acute processes like transverse myelitis by its gradual onset and characteristic cutaneous marker.
- 4. D.** A brief cessation of breathing and cyanosis triggered specifically by crying after frustration, with rapid, complete resolution and a normal neurologic exam without a postictal period, is classic for a cyanotic breath-holding spell, distinguished from a seizure (which would show a postictal state) and from the pallid type (typically triggered by pain or startle rather than frustration/crying).
- 5. C.** Given significant clinical overlap between complicated/hemiplegic migraine and stroke, new focal neurologic deficits during a severe headache warrant evaluation for stroke and other secondary causes before attributing the episode to a migraine variant, even in a patient with a known migraine history.

- 6. E.** Fluctuating ptosis and diplopia that worsen with sustained use (fatigability) and improve with rest, along with fatigable limb weakness, are classic for juvenile myasthenia gravis, a neuromuscular junction disorder distinguished from other neurologic conditions by this specific fatigable pattern.
- 7. D.** Morning headaches, vomiting, truncal ataxia, and a midline posterior fossa mass with obstructive hydrocephalus on MRI are classic for a posterior fossa brain tumor such as medulloblastoma, distinguished from post-infectious cerebellar ataxia by the presence of a mass lesion and hydrocephalus on imaging.
- 8. E.** Continued seizure activity despite an adequate benzodiazepine dose and a second-line antiepileptic load defines refractory status epilepticus, requiring escalation to a continuous infusion antiepileptic agent and ICU-level care, rather than repeating a benzodiazepine alone or deferring further intervention.
- 9. D.** A tender, fluctuant, intermittently draining swelling along the anterior border of the sternocleidomastoid muscle that becomes acutely infected is classic for an infected branchial cleft cyst, distinguished from a thyroglossal duct cyst by its lateral (rather than midline) location and lack of movement with tongue protrusion.
- 10. A.** A midline neck swelling that moves upward with tongue protrusion, becoming acutely tender and infected, is classic for an infected thyroglossal duct cyst, distinguished from a branchial cleft cyst by its midline location and characteristic movement with tongue protrusion.
- 11. D.** First-line management of anterior epistaxis without hemodynamic instability is direct firm pressure on the nasal ala (compressing the anterior septum) for several minutes with the head tilted slightly forward (to avoid swallowing blood), rather than head tilting backward, posterior packing, or more invasive measures reserved for refractory bleeding.
- 12. A.** Before attempting removal of an ear foreign body, it is important to identify the type of object, since button batteries pose a risk of rapid tissue injury and require urgent removal, while other inert objects may allow a more measured, less urgent approach tailored to the specific object and its position.
- 13. E.** Fever, trismus, and swelling extending along the lateral neck from the angle of the jaw, with a deep space fluid collection lateral to the pharynx on imaging, are classic for a parapharyngeal abscess, distinguished from peritonsillar abscess (more anterior, without this lateral extension) and Ludwig angina (floor of mouth/submandibular space).
- 14. A.** New unilateral facial weakness developing in the setting of acute otitis media can result from facial nerve palsy as a recognized complication of the middle ear infection (from inflammation affecting the nerve as it courses through the temporal bone), warranting prompt recognition and appropriate management rather than assuming an unrelated or coincidental cause.
- 15. C.** Chronic ear drainage, conductive hearing loss, and a whitish mass behind an intact tympanic membrane are classic for cholesteatoma, an abnormal accumulation of squamous epithelium in the

middle ear that can erode surrounding structures if untreated, distinguished from simple otitis media or externa by this specific mass finding.

16. E. A well-documented pattern of frequent, culture-confirmed streptococcal tonsillitis episodes with significant associated impact (school absence) meets criteria commonly used to support referral for tonsillectomy evaluation, rather than continuing indefinite antibiotic courses or pursuing surgery without confirming the frequency and documentation of episodes.

17. C. Chronic cough, recurrent sinopulmonary infections, and situs inversus together are classic for primary ciliary dyskinesia, in which impaired ciliary function affects both mucociliary clearance and left-right body patterning during development, distinguishing it from cystic fibrosis or isolated recurrent infections, which do not include situs inversus.

18. A. A pleural effusion with milky, high-triglyceride fluid, especially appearing or worsening once enteral feeds are introduced, is classic for chylothorax, caused by leakage of lymphatic fluid into the pleural space, distinguished from empyema (purulent fluid) and hemothorax (bloody fluid) by this specific fluid characteristic.

19. C. Recurrent expiratory stridor and barking cough that worsen with increased intrathoracic pressure (crying, feeding) and improve with positive airway pressure, with dynamic airway collapse on bronchoscopy, are classic for tracheomalacia, distinguished from fixed airway lesions (vascular ring, subglottic stenosis) by the dynamic nature of the collapse.

20. E. Loud snoring, witnessed apneic pauses during sleep, daytime behavioral issues, and tonsillar hypertrophy together suggest obstructive sleep apnea; a sleep study to confirm the diagnosis and severity, along with consideration of adenotonsillectomy, is the appropriate next step rather than reassurance or symptomatic treatment alone.

21. A. Recurrent cough, fever, and dyspnea occurring hours after exposure to an organic antigen (moldy hay), with diffuse ground-glass opacities that improve with avoidance of the exposure, are classic for hypersensitivity pneumonitis, an immune-mediated lung disease triggered by inhaled organic antigens, distinguished from infectious or purely reactive airway causes by this specific exposure-linked, recurrent pattern.

22. D. Episodic exertional shortness of breath with throat tightness that resolves quickly with rest, normal spirometry between episodes, and no response to albuterol during episodes are classic for vocal cord dysfunction (paradoxical vocal fold motion), distinguished from exercise-induced asthma by the lack of bronchodilator response and the specific throat-tightness symptom.

23. A. A birth history involving traction injury (associated with a brachial plexus injury) combined with persistent unilateral diaphragmatic elevation and reduced movement on ultrasound is classic for phrenic nerve injury causing diaphragmatic paralysis, distinguished from congenital diaphragmatic hernia by the absence of herniated abdominal contents in the chest.

- 24. D.** Persistent stridor at rest, significant retractions, and decreasing alertness despite maximal standard croup therapy (repeated racemic epinephrine and dexamethasone) indicate impending airway failure, requiring preparation for advanced airway management rather than continued standard therapy or discharge.
- 25. E.** Evaluation of a significant pectus excavatum deformity being considered for surgical correction should include cardiopulmonary assessment (such as echocardiogram and pulmonary function testing) to determine whether the deformity is causing a functional cardiopulmonary impact, rather than assuming the finding is purely cosmetic or limiting evaluation to unrelated factors.
- 26. D.** Recurrent pneumonia consistently affecting the same anatomic lung segment warrants further evaluation for an underlying anatomic (eg, airway anomaly, foreign body), functional (eg, aspiration), or immunologic cause, rather than assuming a benign viral etiology for each episode without investigation.
- 27. C.** Normal wall thickness and systolic function with impaired diastolic filling and biatrial enlargement are classic for restrictive cardiomyopathy, distinguished from dilated cardiomyopathy (chamber dilation with reduced systolic function) and hypertrophic cardiomyopathy (increased wall thickness) by this specific pattern of preserved systolic function with diastolic impairment.
- 28. B.** A fixed, widely split second heart sound with a systolic ejection murmur and a confirmed moderate atrial septal defect on echocardiogram in an asymptomatic, normally growing child supports elective, non-urgent evaluation and planned closure, rather than emergent intervention or foregoing follow-up entirely.
- 29. C.** Persistent fetal bradycardia in the setting of maternal anti-Ro/La antibodies (associated with autoimmune conditions such as lupus) is classic for congenital complete heart block, caused by antibody-mediated injury to the fetal cardiac conduction system, distinguished from simple sinus bradycardia by this specific immunologic association and persistent, severe rate reduction.
- 30. A.** Diminished femoral pulses relative to brachial pulses with a blood pressure discrepancy between upper and lower extremities in an infant with heart failure symptoms are classic for coarctation of the aorta, in which narrowing of the aorta (typically near the ductus arteriosus) reduces flow to the lower body.
- 31. D.** Muffled heart sounds, jugular venous distension, hypotension that worsens with inspiration (pulsus paradoxus), and a large pericardial effusion with chamber compression on echocardiogram together describe cardiac tamponade, a life-threatening emergency requiring urgent pericardiocentesis to relieve the pressure on the heart.
- 32. A.** Patients with Marfan syndrome require regular cardiology follow-up with serial echocardiographic monitoring of the aortic root diameter, given the significant risk of progressive dilation leading to aortic dissection, a life-threatening complication that can be mitigated with appropriate surveillance and timely intervention.

- 33. E.** A short PR interval with a slurred QRS upstroke (delta wave) on ECG, along with a history of palpitations, is classic for Wolff-Parkinson-White syndrome, caused by an accessory conduction pathway that pre-excites the ventricle, distinguishing it from long QT syndrome (prolonged QT) and AV block (prolonged, not short, PR interval or more severe conduction abnormality).
- 34. A.** Elevated right ventricular pressure estimates and right ventricular hypertrophy in a former very preterm infant with severe bronchopulmonary dysplasia reflect pulmonary hypertension secondary to chronic lung disease, a recognized complication in this population related to chronically elevated pulmonary vascular resistance.
- 35. B.** Chronic dysphagia, food impaction, esophageal rings, and eosinophilic infiltration on biopsy with a normal pH probe (excluding reflux as the primary cause) are classic for eosinophilic esophagitis, an immune/allergen-mediated condition often seen in patients with other atopic disease.
- 36. A.** A symptomatic esophageal foreign body (drooling, difficulty swallowing) confirmed by radiograph requires prompt endoscopic removal rather than watchful waiting, since a lodged coin causing symptoms carries risk of pressure injury, obstruction, or aspiration if not removed.
- 37. E.** Caustic ingestion management avoids inducing vomiting (which re-exposes the esophagus to the caustic substance) and avoids attempting neutralization or dilution by mouth (which can generate heat or further injury); prompt evaluation, including consideration of endoscopy, is needed to assess the extent of esophageal injury.
- 38. C.** Progressive conjugated hyperbilirubinemia with acholic stools and dark urine in a young infant is concerning for biliary atresia, which requires prompt evaluation and, if confirmed, timely surgical intervention (Kasai procedure), since outcomes are significantly better with earlier treatment; this should not be mistaken for physiologic jaundice, which is unconjugated.
- 39. B.** Chronic diarrhea, poor growth, and dependence on long-term parenteral nutrition following extensive small bowel resection describe short bowel syndrome (intestinal failure), in which insufficient functional bowel length impairs adequate enteral absorption of nutrients and fluids.
- 40. A.** Sudden hematemesis with hemodynamic instability in a child with known portal hypertension is most likely from bleeding esophageal varices, a life-threatening complication requiring hemodynamic resuscitation together with urgent endoscopic evaluation and therapy (such as band ligation or sclerotherapy).
- 41. D.** In cystic fibrosis, malabsorption (from pancreatic insufficiency), chronic cough, and bulky stools all contribute to increased straining during defecation, which is a recognized mechanism for the increased risk of rectal prolapse seen in this population, rather than being an unrelated or coincidental finding.
- 42. B.** Bright red blood on the surface of hard stools, pain with defecation, and a visible small linear tear on the posterior anal verge are classic for an anal fissure, commonly related to constipation and hard

stool passage, distinguished from other causes of rectal bleeding by this specific visible finding and pain pattern.

43. A. Recurrent upper abdominal discomfort and early satiety without alarm features and with a normal endoscopy are consistent with functional dyspepsia, a diagnosis of exclusion made after ruling out structural or other identifiable causes, rather than pursuing an organic diagnosis without supporting findings.

44. B. Jaundice, coagulopathy, altered mental status, and markedly elevated transaminases together describe acute liver failure, a life-threatening condition requiring urgent supportive care, identification of the underlying cause (such as an acetaminophen level), and consideration of transfer to a liver transplant center given the risk of rapid deterioration.

45. A. Nephrotic syndrome is associated with a hypercoagulable state (related to urinary loss of anticoagulant proteins, among other factors), placing patients at increased risk for venous thromboembolism; new unilateral limb swelling, pain, and warmth in this context should raise concern for this complication rather than being attributed to a benign or unrelated cause.

46. D. Dark urine, elevated creatine kinase, and rising creatinine following extreme exertion describe rhabdomyolysis, which can cause acute kidney injury from myoglobin-related tubular injury; aggressive IV fluid hydration and monitoring for electrolyte abnormalities and worsening renal function are the priority management steps.

47. D. Failure to thrive with a normal anion gap metabolic acidosis and an inappropriately alkaline urine pH (rather than the expected acidic urine in response to systemic acidosis) are classic for renal tubular acidosis, in which impaired renal acid handling prevents appropriate urinary acidification.

48. B. Reflux of contrast into the ureters and renal pelvis during voiding on a VCUG, in a child with a history of febrile UTI, is diagnostic of vesicoureteral reflux, a condition that increases the risk of recurrent febrile UTIs and potential renal scarring if not appropriately managed.

49. E. Recurrent cramping lower abdominal pain occurring specifically with menses, without an identifiable structural cause on pelvic ultrasound, is classic for primary dysmenorrhea, distinguished from endometriosis (which would typically show additional findings or a broader pain pattern) and other secondary causes requiring an identifiable structural abnormality.

50. C. A soft, painless scrotal mass that enlarges with standing or Valsalva and has a 'bag of worms' texture is classic for a varicocele, caused by dilated veins in the pampiniform plexus, distinguished from hydrocele (which transilluminates) and testicular torsion (an acute, painful presentation).

51. A. A urethral opening on the ventral surface of the penis rather than at the tip describes hypospadias; referral to pediatric urology is appropriate, and routine circumcision should be avoided until after urologic evaluation, since the foreskin may be needed as tissue for later surgical repair of the hypospadias.

- 52. A.** Bilaterally enlarged, echogenic kidneys on prenatal ultrasound with subsequent hypertension and reduced renal function, in the absence of a family history suggestive of the adult-onset form, are classic for autosomal recessive polycystic kidney disease, distinguished from the autosomal dominant form, which typically presents later in life and would be expected to show a positive family history.
- 53. D.** Limp, fever, focal bone pain, elevated inflammatory markers, and MRI showing focal bone marrow edema with a subperiosteal fluid collection together are classic for acute hematogenous osteomyelitis, distinguished from transient synovitis (a joint, not bone, process) and from malignancy (which typically has a more indolent, longer-standing course rather than this acute febrile presentation).
- 54. B.** Risk factors for developmental dysplasia of the hip (breech presentation) combined with a positive Ortolani/Barlow maneuver on exam warrant referral for hip ultrasound and orthopedic evaluation, since early identification and treatment significantly improve outcomes compared with delayed recognition.
- 55. B.** Dactylitis (sausage-like digit swelling), nail pitting, and a personal history of psoriasis together are classic for juvenile psoriatic arthritis, distinguished from other forms of JIA by these specific psoriasis-associated features.
- 56. A.** Widespread musculoskeletal pain, fatigue, sleep disturbance, and multiple tender points with a normal inflammatory and rheumatologic workup are classic for juvenile fibromyalgia, a diagnosis made after excluding inflammatory or other identifiable causes given the normal objective testing.
- 57. C.** Recurrent oral ulcers, genital ulcers, and uveitis together are classic for Behçet disease, a systemic vasculitis distinguished from isolated aphthous stomatitis or herpes simplex by the combination of oral, genital, and ocular involvement.
- 58. D.** Raynaud phenomenon, skin thickening of the fingers and face, dysphagia, and positive anti-Scl-70 (anti-topoisomerase) antibodies together are classic for systemic sclerosis, distinguished from localized morphea by the presence of Raynaud phenomenon and systemic (rather than purely localized skin) involvement.
- 59. C.** Recurrent multifocal bone pain and swelling with imaging showing multiple sterile bone lesions and negative cultures despite biopsy are classic for chronic recurrent multifocal osteomyelitis (CRMO), an autoinflammatory bone condition distinguished from infectious osteomyelitis by the sterile, multifocal, recurrent nature of the lesions.
- 60. E.** Joint pain, a lupus-like rash, positive ANA and anti-histone antibodies developing in the setting of a known triggering medication (such as minocycline), with resolution after discontinuing the drug, are classic for drug-induced lupus, distinguished from idiopathic SLE by this specific medication association, antibody pattern, and reversibility.
- 61. D.** Delayed pubertal development and bone age with a growth velocity appropriate for bone age, in the setting of a family history of similarly delayed development, are classic for constitutional delay of

growth and puberty, a normal variant distinguished from pathologic causes (growth hormone deficiency, hypothyroidism) by the normal growth velocity relative to bone age.

62. B. Short stature, a webbed neck, widely spaced nipples, and a 45,X karyotype together are classic for Turner syndrome, distinguished from other syndromes by this specific karyotype and combination of physical findings.

63. A. Tall stature, gynecomastia, small testes, learning difficulties, and a 47,XXY karyotype together are classic for Klinefelter syndrome, distinguished from other conditions by this specific karyotype and phenotype in a male patient.

64. A. A strong multi-generational family history of early-onset diabetes, non-obese body habitus, negative islet autoantibodies, and preserved endogenous insulin production (C-peptide) together are classic for maturity-onset diabetes of the young (MODY), a monogenic form of diabetes distinguished from both type 1 (which shows positive autoantibodies and low C-peptide) and type 2 diabetes (more strongly associated with obesity/insulin resistance).

65. E. Recurrent severe hypoglycemia requiring very high glucose infusion rates, with an inappropriately elevated insulin level at the time of hypoglycemia, are classic for congenital hyperinsulinism, in which dysregulated insulin secretion continues despite low glucose, distinguishing it from other causes of neonatal hypoglycemia that would show an appropriately suppressed insulin level.

66. E. Fatigue, cold intolerance, a firm diffusely enlarged thyroid, elevated TSH, low free T4, and positive thyroid peroxidase antibodies together are classic for Hashimoto thyroiditis, the most common cause of acquired hypothyroidism in children, distinguished from Graves disease by the opposite hormonal pattern and different antibody profile.

67. C. Height significantly below expected range with a reduced growth velocity, delayed bone age, and otherwise unremarkable initial screening warrants referral to pediatric endocrinology for further evaluation, including consideration of growth hormone stimulation testing, rather than assuming a benign familial pattern or starting treatment without appropriate diagnostic workup.

68. A. Tachycardia, irritability, poor weight gain, and a goiter in a newborn of a mother with poorly controlled Graves disease during pregnancy are classic for neonatal (transient) hyperthyroidism, caused by transplacental passage of maternal thyroid-stimulating antibodies, which typically resolves as the antibodies clear from the infant's circulation.

69. A. Mandated reporters, including physicians, are legally required to report a reasonable suspicion of child abuse to the appropriate child protective services or law enforcement agency; absolute certainty is not required, and the obligation to report cannot be waived by family consent or discretion.

70. C. Bruising in a pre-mobile infant is inherently concerning, since infants who are not yet independently mobile lack the typical mechanisms for accidental bruising seen in older, ambulatory

children; this finding warrants further evaluation for potential abuse, including consideration of an underlying bleeding disorder as part of a thorough workup.

71. C. A pattern of a young child being left without appropriate adult supervision, particularly in an unsafe situation (near traffic), raises concern for supervisory neglect, warranting further evaluation and, as appropriate, involvement of protective services, rather than being dismissed as normal independence or addressed only informally.

72. B. A child's exposure to repeated violence between adults in the home is a recognized adverse experience with significant potential impact on the child's safety and wellbeing, warranting appropriate screening, support, and involvement of social work as indicated, rather than being disregarded because the child was not directly physically harmed.

73. D. Well-demarcated erythematous plaques with silvery scale at classic sites (scalp, elbows, knees) along with nail pitting are characteristic of psoriasis, distinguished from atopic dermatitis (typically flexural, without this specific scale and nail finding) and from other scaly conditions by this classic distribution and nail involvement.

74. D. For atopic dermatitis not adequately controlled with emollients and a low-potency topical corticosteroid, a stepwise approach involves escalating to a higher-potency topical corticosteroid or a topical calcineurin inhibitor while continuing emollients and trigger avoidance, rather than discontinuing treatment entirely or jumping directly to systemic immunosuppression.

75. E. Multiple small, flesh-colored, dome-shaped papules with central umbilication are the classic, pathognomonic appearance of molluscum contagiosum, a common viral skin infection in children, distinguished from warts (rougher surface without umbilication) and eczema herpeticum (painful vesicles and erosions rather than these characteristic painless papules).

76. A. A single herald patch followed by numerous smaller oval scaly lesions distributed along skin lines (a 'Christmas tree' pattern) on the trunk are classic for pityriasis rosea, a typically self-limited condition distinguished from tinea corporis and guttate psoriasis by this specific herald-patch-and-distribution pattern.

77. E. Well-defined, symmetric patches of complete depigmentation (not just lightening) without a preceding inflammatory process are classic for vitiligo, an autoimmune condition affecting melanocytes, distinguished from other hypopigmenting conditions (tinea versicolor, pityriasis alba, post-inflammatory hypopigmentation) by the complete depigmentation and lack of scale or preceding inflammation.

78. B. An intensely itchy, linear vesicular rash on exposed skin with borders corresponding to areas of direct contact, occurring after outdoor exposure, is classic for allergic contact dermatitis from a plant allergen such as poison ivy or poison oak, distinguished from other rashes by this specific linear, contact-related pattern.

79. D. Microcytic, hypochromic anemia with low ferritin in a toddler on an exclusively cow's milk-based diet with minimal solid food intake (a diet low in iron and associated with occult GI blood loss from cow's milk protein) is classic for nutritional iron deficiency anemia, the most common cause of anemia in this age group with this dietary history.

80. B. Acute hemolysis with pallor, dark urine, and jaundice triggered by fava bean ingestion, with bite cells on peripheral smear, are classic for G6PD deficiency, an X-linked enzyme deficiency in which oxidative stress from specific triggers (fava beans, certain medications, infections) precipitates hemolysis.

81. A. Severe pallor, failure to thrive, hepatosplenomegaly, severe microcytic anemia, and markedly reduced beta-globin chain production on hemoglobin electrophoresis together are classic for beta-thalassemia major, a severe, typically transfusion-dependent inherited hemoglobinopathy.

82. B. A rapidly growing abdominal mass with jaw involvement, a very high LDH, and a 'starry sky' pattern on biopsy of a highly proliferative small round blue cell tumor are classic for Burkitt lymphoma, a highly aggressive form of non-Hodgkin lymphoma, distinguished from Hodgkin lymphoma (Reed-Sternberg cells) by this specific pathologic pattern and rapid growth.

83. A. A scalp rash, draining ear, lytic skull lesions, and biopsy showing cells with reniform nuclei positive for CD1a and S100 together are classic for Langerhans cell histiocytosis, distinguished from other conditions by this specific immunophenotype and multi-system pattern of involvement.

84. C. An unprovoked deep venous thrombosis (without an identifiable acute precipitating risk factor) in an adolescent warrants evaluation for an underlying inherited or acquired thrombophilia, since identifying an underlying cause can inform duration of anticoagulation and future risk management, rather than assuming the event was provoked or foregoing evaluation.

85. A. For a child with a known food allergy, essential discharge education includes proper use of an epinephrine autoinjector, recognition of anaphylaxis symptoms, and a clear action plan for future reactions, since prompt epinephrine administration is critical for a severe allergic reaction and delayed treatment significantly worsens outcomes.

86. B. Eczema, recurrent infections, and thrombocytopenia with characteristically small platelets in a male infant together are classic for Wiskott-Aldrich syndrome, an X-linked immunodeficiency distinguished from other primary immunodeficiencies by this specific triad including the small platelet size.

87. C. For allergic rhinitis not adequately controlled with an oral antihistamine alone, adding an intranasal corticosteroid is a highly effective next step in a stepwise management approach, given its strong efficacy for nasal congestion and other allergic rhinitis symptoms, rather than proceeding directly to immunotherapy or systemic corticosteroids.

- 88. E.** Patients with spina bifida who undergo multiple surgical procedures are at increased risk for developing latex allergy due to repeated latex exposure; new hives and wheezing during a procedure shortly after latex exposure (such as from gloves) in this population should raise strong suspicion for this specific allergy.
- 89. A.** Current car seat safety guidance recommends keeping children rear-facing as long as possible within the specific seat's height and weight limits, rather than transitioning to forward-facing at the earliest age allowed, since rear-facing seating provides better protection for young children in a crash.
- 90. C.** Young children who ingest cannabis edibles can develop significant and sometimes prolonged sedation, ataxia, and other effects; given the unpredictable dose and potential for a more severe or prolonged course than in adults, admission for observation and supportive care is warranted rather than immediate discharge or assuming a uniformly mild course.
- 91. A.** Agitation, hyperthermia, tachycardia, and hyponatremia following stimulant-type drug use with excessive water intake are classic for MDMA (ecstasy) toxicity, in which hyponatremia results from a combination of excessive free water intake and drug-related inappropriate antidiuretic hormone secretion, distinguishing it from other intoxications with different characteristic vital sign and electrolyte patterns.
- 92. C.** Salicylate toxicity classically produces a mixed respiratory alkalosis (from direct respiratory center stimulation) and metabolic acidosis; management includes urine and/or serum alkalinization with sodium bicarbonate to enhance renal elimination of salicylate, along with supportive care, rather than antidotes for other toxidromes.
- 93. A.** ATV-related injuries, particularly when unhelmeted, carry significant risk of multi-system trauma including serious head injury; a full trauma evaluation is warranted given this mechanism, rather than focusing only on the most visible injury or assuming the injuries are minor.
- 94. E.** Disorientation, slurred speech, and a cardiac arrhythmia occurring in temporal association with inhalant (aerosol) use are classic for inhalant abuse ('huffing'), which can cause direct cardiotoxicity, including life-threatening arrhythmias, from the inhaled volatile hydrocarbon.
- 95. D.** The most important water safety counseling point for families with young children is constant, direct adult supervision within arm's reach during any water exposure, since drowning can occur silently and rapidly even during brief lapses, and no single device (flotation aid, bath seat) or measure (swim lessons, fencing) alone eliminates this risk without active supervision.
- 96. B.** Recommended firearm safety guidance for households with children includes storing firearms unloaded and locked, with ammunition stored separately and also locked, since this approach meaningfully reduces the risk of unintentional pediatric firearm injury compared with less secure storage practices.

- 97. C.** Accidental methamphetamine exposure in a young child can cause significant toxicity, including severe agitation, tachycardia, and hypertension; admission for supportive care and monitoring, with benzodiazepines for significant agitation as needed, is appropriate given the risk of serious complications from this exposure in a young child.
- 98. B.** Unresponsiveness, pinpoint pupils, and severe respiratory depression are classic for opioid overdose; naloxone reverses the respiratory depression and should be administered promptly along with supportive respiratory management, rather than antidotes intended for other toxidromes.
- 99. D.** Fever with a markedly low absolute neutrophil count (neutropenic fever) in a patient undergoing chemotherapy is a medical emergency requiring prompt evaluation and empiric broad-spectrum IV antibiotics, given the significant risk of rapid deterioration from infection in the setting of severely impaired immune defenses, rather than outpatient management or delaying treatment for culture results.
- 100. A.** Poor weight gain with increased work of breathing during feeds in an infant with a large unrepaired VSD reflects failure to thrive related to increased caloric expenditure (from the work of breathing and increased cardiac workload) and feeding difficulty due to underlying heart failure, a well-recognized consequence of significant left-to-right shunting.
- 101. A.** Neonates are particularly vulnerable to rapid temperature shifts and associated metabolic derangements (such as hypoglycemia and acid-base disturbances) during rewarming; a gradual, controlled approach with close monitoring is preferred over rapid rewarming methods, which carry higher risk of complications in this especially vulnerable population.
- 102. D.** Overly rapid correction of chronic hyponatremia risks cerebral edema and seizures as water shifts into brain cells that have adapted to the elevated serum sodium; gradual, controlled correction over an appropriate time course is essential to minimize this risk.
- 103. E.** Perioral and hand paresthesias, lightheadedness, rapid breathing, a low PCO₂, and an elevated pH during an anxiety episode together describe acute hyperventilation-induced respiratory alkalosis, a physiologic response to rapid, excessive breathing that is distinguished from metabolic causes of alkalosis by the primary abnormality being in PCO₂ rather than bicarbonate.
- 104. D.** Debilitating fatigue lasting more than 6 months, worsened by exertion (post-exertional malaise), unrefreshing sleep, and cognitive difficulties, with an unremarkable extensive medical workup, meet diagnostic criteria for myalgic encephalomyelitis/chronic fatigue syndrome, a diagnosis made after excluding other identifiable causes.
- 105. E.** Rapidly progressive psychiatric symptoms, memory problems, abnormal movements, and seizures following a nonspecific illness should raise strong suspicion for autoimmune encephalitis (such as anti-NMDA receptor encephalitis), a treatable condition that can mimic primary psychiatric illness and requires prompt recognition given the availability of effective immunotherapy.

- 106. A.** Fatigue, pallor, glossitis, macrocytic anemia, and neurologic symptoms (paresthesias) in a patient on a strict unsupplemented vegan diet are classic for vitamin B12 deficiency, distinguished from folate deficiency by the characteristic neurologic involvement seen specifically with B12 deficiency.
- 107. A.** Recurrent hypoglycemia during prolonged fasting in a slim-built young child, with appropriate ketosis present at the time of hypoglycemia and a reassuring extensive metabolic workup, is classic for ketotic hypoglycemia of childhood, a relatively common and generally benign condition related to limited glycogen and fat reserves relative to metabolic demand during fasting stress.
- 108. E.** Recurrent, self-limited episodes of severe abdominal pain with nausea and pallor, symptom-free intervals, a family history of migraine, and a normal extensive GI workup are classic for abdominal migraine, a migraine-spectrum disorder in children distinguished from surgical or inflammatory causes by the normal workup and characteristic episodic pattern.
- 109. B.** When repeated hospitalizations are traced to specific, addressable barriers to medication access (cost, logistics) despite a family's clear intent to adhere, the appropriate approach is to identify and address those barriers as part of discharge planning, rather than assuming intentional nonadherence or escalating to a neglect referral without first exploring the underlying cause.
- 110. B.** A markedly elevated temperature and altered mental status after prolonged heat exposure describe heat stroke, a life-threatening emergency; infants are particularly vulnerable to rapid temperature rise in a hot environment, and aggressive active cooling measures with supportive care should begin immediately rather than being delayed for transport or replaced with passive measures.
- 111. A.** Distinguishing an episodic mood disorder along the bipolar spectrum from other conditions with overlapping features (ADHD, disruptive mood dysregulation disorder) requires careful longitudinal assessment of the specific pattern, timing, and associated symptoms of mood episodes, given meaningfully different treatment approaches and prognostic implications across these conditions.
- 112. C.** Intrusive, distressing thoughts (obsessions) that drive time-consuming, repetitive behaviors (compulsions) performed to reduce the associated distress are classic for obsessive-compulsive disorder, distinguished from generalized anxiety or a specific phobia by this specific obsession-compulsion pattern.
- 113. C.** Consistent failure to speak in specific settings (such as school) despite normal speech in comfortable settings (such as home), persisting over months without an underlying language or hearing impairment, is classic for selective mutism, an anxiety-related disorder distinguished from a primary language disorder or hearing loss by this setting-specific pattern.
- 114. A.** For a hospitalized child with intellectual disability experiencing acute agitation, first-line management involves identifying and addressing potential contributing factors (communication barriers, sensory overload, unmet needs, pain) and using individualized behavioral strategies and environmental

modification, reserving more restrictive interventions for situations where these measures are insufficient to maintain safety.

115. E. For an adolescent with opioid use disorder interested in treatment, evidence-based care includes considering medication for opioid use disorder (such as buprenorphine) as part of a comprehensive treatment plan alongside counseling and support, since this approach has demonstrated benefit over abstinence-only or detoxification-alone strategies.

116. D. Abrupt-onset obsessive-compulsive symptoms and tics occurring shortly after a documented streptococcal infection raise consideration for PANDAS, a proposed clinical entity in which an autoimmune response following streptococcal infection is thought to contribute to acute neuropsychiatric symptoms, distinguished from idiopathic Tourette syndrome by this specific abrupt, infection-associated onset.

117. C. A pattern of not seeking comfort from caregivers when distressed, with minimal social and emotional responsiveness, occurring in the context of a documented history of severe early neglect, is classic for reactive attachment disorder, a condition related to grossly inadequate early caregiving that disrupts normal attachment development.

118. E. Multiple persistent physical symptoms without an identifiable medical cause, combined with excessive preoccupation and distress about the symptoms significantly impacting functioning, are classic for somatic symptom disorder, distinguished from malingering or factitious disorder by the genuine (rather than intentionally fabricated) nature of the symptom experience and distress.

119. E. Low mood and worry developing in direct response to a specific identifiable stressor (a new chronic illness diagnosis), causing distress but not meeting full criteria for a major depressive or anxiety disorder, are classic for adjustment disorder, a diagnosis specifically tied to difficulty adjusting to an identifiable life stressor.

120. D. New-onset hallucinations, disorganized thinking, and social withdrawal represent a first-episode psychosis presentation, requiring comprehensive evaluation to rule out medical or substance-related causes along with prompt psychiatric referral, since early intervention in first-episode psychosis is associated with better long-term outcomes.

121. A. The combination of multiple motor tics and at least one vocal tic present for more than one year, waxing and waning in severity, meets diagnostic criteria for Tourette syndrome, distinguished from a transient tic disorder by the required duration and combination of motor and vocal tics.

122. D. Minimizing distress for a child with significant needle phobia involves developmentally appropriate preparation, distraction techniques, topical anesthetic when feasible, and involvement of child life specialists, which together support successful completion of necessary procedures while reducing trauma and distress, rather than proceeding without support, restraining, sedating routinely, or indefinitely postponing necessary care.

123. C. Vesicular skin lesions, lethargy, and seizures in a newborn whose mother had genital lesions around delivery raise strong concern for disseminated neonatal herpes simplex virus infection, a life-threatening condition requiring prompt evaluation and initiation of IV acyclovir rather than delayed or purely topical treatment.

124. A. Lethargy, poor feeding, a high-pitched cry, and opisthotonus in the setting of markedly elevated, inadequately monitored bilirubin describe acute bilirubin encephalopathy, a neurologic emergency requiring immediate treatment, likely including exchange transfusion, to prevent progression to permanent kernicterus.

125. C. Chorioretinitis, intracranial calcifications, and hydrocephalus in a newborn with a maternal history of cat exposure and undercooked meat consumption during pregnancy are classic for congenital toxoplasmosis, distinguished from other congenital infections by this specific exposure history and clinical triad.

126. A. Fever, lethargy, a bulging fontanelle, and CSF findings of neutrophilic pleocytosis with gram-positive cocci in chains in a neonate are classic for Group B Streptococcus meningitis, one of the most common causes of neonatal bacterial meningitis, requiring prompt initiation of appropriate IV antibiotics.

127. E. Periventricular white matter injury with cystic changes on cranial ultrasound in a preterm infant is characteristic of periventricular leukomalacia, which carries an increased risk of cerebral palsy and other long-term neurodevelopmental impairment, warranting close developmental follow-up.

128. D. A sudden hematocrit drop, bulging fontanelle, apnea, and blood within the ventricular system with ventricular dilation on cranial ultrasound in a preterm infant are classic for intraventricular hemorrhage, a common and serious complication of prematurity that can lead to post-hemorrhagic ventricular dilation requiring close monitoring.

129. D. Sudden abdominal distension and pneumoperitoneum in the first days of life in an extremely preterm infant, without the more gradual feeding intolerance and pneumatosis typically seen with necrotizing enterocolitis, describe spontaneous intestinal perforation, a distinct entity from NEC seen particularly in the most premature infants.

130. A. Low bone mineral density and fractures in a former extremely preterm infant on prolonged parenteral nutrition, without a clear traumatic history, are characteristic of osteopenia of prematurity (metabolic bone disease), related to inadequate mineral (calcium/phosphorus) intake during a critical period of bone mineralization, rather than necessarily indicating abuse or a primary bone disorder.

131. E. An annular, scaly rash on the scalp and face in a newborn of a mother with lupus and positive anti-Ro/La antibodies is classic for neonatal lupus (cutaneous), caused by transplacental passage of maternal antibodies; given the shared antibody-mediated mechanism, affected infants should also be evaluated for congenital heart block, the most serious associated manifestation.

132. C. Severe hypotonia, feeding and respiratory difficulty, a distinctive facial appearance, and a maternal history of previously undiagnosed myotonia together are classic for congenital myotonic dystrophy, an autosomal dominant condition often first recognized in an affected infant, leading to diagnosis of the previously unrecognized maternal condition.

133. A. Recurrent coughing, choking with feeds, and pneumonia in an infant who is able to pass a nasogastric tube into the stomach (ruling out esophageal atresia, which would obstruct tube passage) are classic for an H-type tracheoesophageal fistula, in which an abnormal connection exists between the trachea and esophagus without associated esophageal atresia.

134. D. Mild, non-purulent eye redness and discharge occurring within the first day of life, shortly after erythromycin ointment prophylaxis, is classic for chemical conjunctivitis related to the prophylactic agent, a mild, self-limited process distinguished from infectious causes by its early timing and mild, non-purulent character.

135. C. Management of a hemodynamically significant PDA in a preterm infant involves considering pharmacologic closure (such as a cyclooxygenase inhibitor) as an initial approach, with surgical closure reserved for cases where medical therapy fails or is contraindicated, guided by the degree of hemodynamic significance and the infant's overall clinical status, rather than a uniform approach of no treatment or immediate surgery in all cases.

136. E. Cataracts, a cardiac defect, and sensorineural hearing loss in a newborn of an unvaccinated mother with a rash illness early in pregnancy together are classic for congenital rubella syndrome, distinguished from other congenital infections by this specific triad and maternal exposure history.

137. D. A persistent, reticulated, mottled discoloration present at birth with associated skin atrophy that does not resolve with warming is classic for cutis marmorata telangiectatica congenita, a vascular malformation distinguished from simple physiologic cutis marmorata by its persistence and associated skin changes.

138. D. An abnormal newborn screening result flagged for a treatable condition requires prompt contact with the family and arrangement of confirmatory testing and specialist follow-up, given that many conditions detected on newborn screening require timely intervention to prevent serious complications, even when the infant currently appears clinically well.

139. E. When escalating opioid doses have not produced meaningful functional improvement in chronic pain related to medical complexity, a broader interdisciplinary approach — incorporating physical therapy, psychological support, and non-opioid pharmacologic options — alongside reassessment of the current regimen better addresses the multifactorial nature of chronic pain than continued opioid escalation alone.

140. B. Non-ambulatory children, particularly those with severe cerebral palsy, are at increased risk for reduced bone mineral density and low-impact fractures; recognizing this risk supports appropriate

evaluation and consideration of preventive strategies, rather than assuming no bone health considerations are relevant or attributing a low-impact fracture solely to abuse without considering this recognized risk factor.

141. D. Management of sialorrhea in a child with severe neurologic impairment typically follows a stepwise approach — starting with behavioral and positioning strategies, escalating to medication (such as anticholinergic agents) if needed, and reserving surgical or botulinum toxin options for cases refractory to these measures — rather than beginning with the most invasive option.

142. D. Chronic constipation in a non-ambulatory child with a neuromuscular disease, when not adequately controlled with dietary measures alone, warrants a structured bowel regimen tailored to the child's specific needs (including scheduled laxatives, adequate hydration, and consideration of reduced mobility's contribution), rather than assuming the symptom does not require treatment or relying on a single measure like fiber restriction or enemas alone.

143. A. A safe transition home with new durable medical equipment requires coordinating equipment delivery and providing caregiver training prior to or at the time of discharge, along with confirming the equipment is actually in place and functional, rather than assuming the family can manage independently or deferring planning to after discharge.

144. B. Addressing significant sleep disturbance in a child with a neurodevelopmental disability begins with a comprehensive assessment of contributing factors (sleep hygiene, environmental factors, pain, underlying medical issues) before considering pharmacologic options, rather than jumping directly to sedating medication or dismissing the concern as unrelated to the child's care.

145. C. A POLST form translates a patient or family's goals of care into specific, actionable medical orders that can be honored consistently across different care settings (home, ambulance, hospital, etc.), serving as a practical tool to help ensure a patient's wishes are followed, rather than replacing ongoing conversations or applying only within a single setting.

146. C. Recognizing dental care as an important component of overall health for children with medical complexity, the care team can assist the family in identifying dental providers with experience managing medical complexity, such as through referral to specialized dental programs, rather than dismissing the concern or leaving the family to navigate the barrier entirely alone.

147. B. When approved home nursing hours may not be reliably staffed due to a broader shortage, appropriate discharge planning accounts for this gap by exploring additional resources, backup plans, and close follow-up, rather than assuming the approved hours will definitely be available or delaying discharge indefinitely without further problem-solving.

148. C. When actual growth does not match a feeding plan that appears adequate on paper, it is important to reassess the plan's real-world adequacy — including actual delivered volume, tolerance,

and losses — since actual intake and needs may differ meaningfully from initial estimates, rather than assuming the calculation must be correct or making changes without this reassessment.

149. A. Safe discharge for a child with a history of prolonged seizures requires a clear, individualized seizure action plan — including recognition of prolonged seizures and appropriate use of a home rescue medication — with caregiver education completed prior to discharge, rather than relying solely on daily medication, emergency services for every seizure, or deferring planning to a later outpatient visit.

150. C. Acknowledging the impact of a child's medical complexity on a healthy sibling and connecting the family with relevant support resources (such as sibling support programs or counseling) reflects a family-centered approach to care, recognizing that the wellbeing of the whole family, not just the ill child, is an important consideration.

151. C. Confirming appropriate umbilical venous catheter tip position by imaging before use is essential, since a malpositioned line (eg, in the liver or heart) significantly increases the risk of serious complications from infused medications or fluids, and neither external length nor successful blood aspiration alone reliably confirms correct position.

152. A. Careful sterile technique, including appropriate cleansing of the periurethral area before catheter insertion, minimizes contamination and reduces the risk of a false-positive urine culture, which is important for accurate diagnosis and avoiding unnecessary antibiotic treatment.

153. A. Before arthrocentesis, assessing coagulation status (to gauge bleeding risk) and confirming there is no overlying skin infection at the planned insertion site (to avoid introducing infection into the joint) are both important safety considerations that directly affect whether and how the procedure should proceed.

154. D. Informed consent for a skin biopsy should include the indication for the procedure, what the procedure involves, associated risks (bleeding, infection, scarring), and how the results will be used to guide diagnosis and management, rather than focusing narrowly on cosmetic outcome, cost, or timing alone.

155. D. After a reasonable number of failed peripheral IV attempts in a child with chronically difficult access, escalating to additional tools or approaches — such as ultrasound-guided placement, a specialized vascular access team, or intraosseous access if urgent — is more appropriate than continuing unlimited attempts, jumping directly to a surgical line, or using an inappropriately sized catheter.

156. C. Informed decision-making for myringotomy/tympanocentesis should include discussion of the specific indication (diagnostic versus therapeutic), the risks and benefits of the procedure, and reasonable alternatives (such as continued medical management or tympanostomy tube placement), rather than focusing on a single narrow aspect like cosmetic appearance or cost.

157. C. Respecting an adolescent's developmental autonomy involves offering an opportunity to discuss certain sensitive topics privately, as appropriate given the specific topic, applicable confidentiality

protections, and the adolescent's developmental stage, rather than a blanket policy of always including or always excluding a parent regardless of context.

158. B. Effective conflict resolution when a family and team disagree involves active listening, acknowledgment of the family's concerns, and collaborative problem-solving toward a mutually acceptable resolution, involving additional support such as palliative care or ethics consultation for persistent disagreement, rather than unilaterally proceeding, ending engagement, or excluding the family.

159. A. Effective discharge summaries/after-visit summaries use clear, accurate, appropriately detailed language accessible to families, including diagnoses, medications, follow-up needs, and specific warning signs to watch for, since these documents serve as an important reference for ongoing care after discharge.

160. B. Family-centered care recognizes that family structures and decision-making practices vary across cultures and individual families; accommodating a family's preference to include additional extended family members in discussions, where feasible and appropriate, respects this variation rather than imposing a rigid, narrow definition of who may be involved.

161. E. A safe transition of primary care responsibility mid-hospitalization requires a clear, structured handoff between the outgoing and incoming teams covering the clinical course, current status, and outstanding issues, along with clear communication to the family about the change, rather than an implicit or undocumented transition.

162. E. When a family wishes to leave against medical advice, the appropriate approach involves a thorough discussion of the risks and benefits of the recommended plan versus leaving, clear documentation of this discussion, and provision of the safest possible instructions and follow-up plan given the family's decision, rather than attempting to physically prevent departure or withholding further care guidance.

163. B. Post-discharge follow-up calls for conditions with high readmission risk are intended to proactively identify early warning signs, answer questions, and reinforce discharge instructions, aiming to catch and address problems before they progress to a readmission, rather than serving primarily an administrative, billing, or blame-assignment purpose.

164. A. Timely communication with the primary care provider — including a summary of the hospitalization, new diagnoses, medication changes, and follow-up needs — supports continuity of care after discharge and should not be assumed unnecessary simply because a written summary was given to the family or a subspecialist is also involved.

165. C. Checklists for procedures like central line insertion work by helping ensure consistent adherence to evidence-based steps, reducing reliance on memory alone and decreasing the likelihood that a critical

step is inadvertently omitted, rather than functioning primarily as a blame-assignment tool or replacing clinical judgment.

166. D. Reducing diagnostic errors is best supported by combining strategies — structured clinical reasoning approaches, systems supports such as decision support tools, and a culture that encourages diagnostic reconsideration when a patient's course doesn't fit the working diagnosis — rather than relying solely on individual discipline, ignoring the issue, or over-testing indiscriminately.

167. A. When designing a quality improvement project to reduce length of stay, including a balancing measure such as readmission rate helps ensure that the reduction in length of stay does not come at the cost of premature or unsafe discharge, an important safeguard against unintended negative consequences of the primary improvement effort.

168. B. Monitoring compliance with a sepsis care bundle helps ensure reliable, consistent delivery of evidence-based care elements that, together and delivered in a timely manner, have been associated with improved outcomes, rather than serving primarily a punitive, administrative, or reimbursement-focused purpose.

169. A. A high volume of alerts, many perceived as low-value, leading staff to increasingly disregard them describes alert fatigue; an appropriate response involves refining alerts to improve their clinical relevance and reduce low-value interruptions, helping preserve staff attention for the alerts that matter most, rather than increasing alert volume further or disciplining staff individually.

170. B. Two-identifier verification before medication administration or procedures is specifically designed to reduce the risk of wrong-patient errors by ensuring the correct patient is definitively identified before a clinical action is taken, an important patient safety practice rather than a purely administrative requirement.

171. A. Improving family comprehension of discharge instructions is best supported by incorporating teach-back techniques into the discharge process, using plain-language materials, and actually measuring comprehension as part of the improvement effort, rather than relying solely on font size changes, assumed adequacy, or a signature acknowledging receipt without assessing true understanding.

172. A. Clear, specific rapid response team activation criteria help ensure early, consistent recognition and response to clinical deterioration across the hospital, reducing reliance on individual judgment alone about when to escalate care, which can vary and potentially delay appropriate intervention.

173. E. For a clinically stable, improving patient without a specific ongoing concern for electrolyte abnormality, high-value care supports reducing lab frequency to align with actual clinical need, since routine repeat testing without a clear indication adds cost and patient discomfort without a corresponding clinical benefit.

174. B. Pretest probability refers to the estimated likelihood that a patient has a given condition before a specific test result is known, based on factors such as clinical presentation, history, and disease

prevalence, and is a key input for interpreting subsequent test results (eg, via likelihood ratios) in clinical decision-making.

175. D. Number needed to harm (NNH) represents the number of patients who would need to receive a given treatment for one additional patient to experience a specific adverse effect, compared with not receiving the treatment, providing a practical way to communicate the magnitude of a therapy's risk, analogous to number needed to treat for benefit.

176. B. A pattern of ordering a specific test or treatment more often than evidence supports for a given clinical scenario describes overuse/overtreatment; addressing it involves reviewing the relevant evidence, providing feedback and education, and considering systems-level interventions such as clinical decision support to better align practice with evidence, rather than assuming the pattern reflects appropriately thorough care.

177. B. A 95% confidence interval provides a range of values within which the true effect size is likely to lie given the observed data and specified confidence level; when this interval does not cross the point of no effect, it supports that the observed effect is unlikely to be due to chance alone, though it does not indicate that 95% of future patients will experience the exact reported effect or address the treatment's safety profile.

178. D. A cost-effectiveness analysis explicitly weighs the clinical benefit gained from an intervention against its cost, making it the analysis best suited to evaluating whether an expensive intervention provides good value relative to its clinical benefit, distinguished from studies assessing only efficacy or only cost in isolation.

179. D. When earlier diagnosis (eg, through screening) appears to extend survival time from diagnosis to death without actually changing overall population mortality, this reflects lead-time bias, in which the apparent survival benefit is an artifact of earlier diagnosis rather than a true improvement in outcomes or delay in death.

180. A. High-value care supports discontinuing unnecessary maintenance IV fluids once a patient is adequately tolerating oral intake, since continuing IV fluids without a specific ongoing indication adds cost, discomfort, and potential complications (such as fluid overload or line-related issues) without a corresponding benefit.

181. B. Undisclosed financial conflicts of interest among guideline panel members raise legitimate concern about potential bias in the resulting recommendations, undermining confidence in the guideline's trustworthiness regardless of panel members' expertise or whether the underlying evidence is published, since transparency about such relationships is essential for evaluating potential influence on recommendations.

182. A. Drawing conclusions about a therapy's effectiveness based only on visible favorable outcomes (case reports of patients who did well), without accounting for patients who had poor outcomes and

were not reported or considered, describes survivorship bias, which can create a misleadingly positive impression of an unproven therapy's effectiveness.

183. D. An identified systemic gap in after-hours interpreter access, causing consistent delays for families with limited English proficiency, warrants advocacy for a hospital-wide policy solution (such as reliable video or phone interpretation services), rather than addressing only individual cases or accepting informal interpretation as an adequate permanent substitute.

184. B. Effective mentorship and succession planning involves structured support — graduated leadership opportunities, honest feedback, and guidance tailored to the individual's specific goals — rather than assuming leadership skills develop without support or placing someone in a role without adequate preparation.

185. A. As evidence and professional guidance regarding race-based adjustments in clinical tools continues to evolve, an appropriate response is to stay informed about this evidence and relevant society guidance, and to adopt updated, evidence-based versions of clinical tools as they become available, rather than continuing outdated practice indefinitely or making unilateral, ad hoc decisions outside of institutional or professional guidance.

186. D. Effective population health advocacy for a recurring community injury pattern involves partnering with community organizations and public health resources to develop and support targeted prevention initiatives, extending impact beyond what can be achieved through individual clinical encounters alone.

187. C. When a thorough, shared decision-making process involving the family and care team concludes that continued life-sustaining treatment no longer aligns with a child's best interests or the family's informed goals of care, withdrawing such treatment can be an ethically appropriate choice, distinguished from an absolute prohibition or a requirement for unilateral decision-making by only one party.

188. D. When parents with joint decision-making authority disagree about a significant treatment decision, the appropriate approach is to facilitate further discussion between them, involving additional support such as ethics consultation or social work as needed, while appropriately addressing any genuinely time-sensitive clinical needs in the interim, rather than arbitrarily favoring one parent or refusing all care pending full resolution.

189. A. Communicating with a child about a serious diagnosis and prognosis should involve honest, developmentally appropriate information tailored to the child's level of understanding, coordinated with the family regarding how and when specific details are shared, rather than withholding all information, using adult-level language and detail regardless of developmental stage, or providing false reassurance.

190. E. Maintaining appropriate professional boundaries with patients' families, including declining personal social media connections and directing ongoing communication through appropriate clinical

channels, helps preserve the professional nature of the therapeutic relationship, regardless of how positive the relationship with a specific family may be.

191. D. Effective bedside teaching uses focused teaching points directly tied to the patient in front of the learner, engages the learner with questions that promote clinical reasoning (rather than only closed-ended recall questions), and remains mindful of the patient's and family's experience during the teaching interaction.

192. E. Effective professionalism education combines explicit teaching with consistent role modeling by faculty and ongoing feedback, since trainees' developing professional identity is strongly influenced by the observed behavior of supervising physicians, not solely by formal lectures or policies.

193. E. An entrustable professional activities (EPA) framework defines specific clinical activities that can be entrusted to a trainee at a defined level of supervision based on demonstrated competence, supporting individualized, competency-based supervision decisions rather than supervision based solely on training year or serving as a replacement for all other assessment.

194. A. Effective teaching of handoff communication uses a structured framework, direct observation with feedback, and practice opportunities, since handoff communication is a learnable skill with well-described best practices, rather than assuming it will develop automatically through clinical experience alone or teaching it through written material without observation and practice.

195. C. Identifying exposed and unexposed groups and following them forward over time to assess a later outcome is the defining feature of a prospective cohort study, distinguished from a case-control study (which looks backward from outcome status) and a cross-sectional study (which assesses exposure and outcome at a single point in time).

196. E. Analyzing outcomes according to participants' originally assigned group, regardless of whether they actually received the full intended treatment, describes intention-to-treat analysis, an approach that preserves the benefits of randomization and better reflects real-world effectiveness, distinguished from per-protocol or as-treated analyses, which group participants differently.

197. C. This scenario illustrates the important distinction between statistical significance (an effect unlikely to be due to chance alone, which becomes easier to detect with larger sample sizes even for small effects) and clinical significance (whether the magnitude of the effect is actually meaningful to patients), a key concept in interpreting trial results appropriately.

198. D. Reproducibility — the ability of independent researchers to obtain similar results using similar methods — is an important component of establishing confidence in a scientific finding; failure to replicate a prominent finding raises important questions about its validity and warrants further scrutiny, though it does not by itself prove misconduct occurred.

199. D. Minimal-risk research involving only already-collected, de-identified data may be eligible for an expedited review process or a waiver of certain requirements such as individual consent, consistent with

applicable research regulations, though appropriate institutional review board oversight and determination of eligibility for such provisions remain necessary rather than being entirely bypassed.

200. C. Resolving an authorship order disagreement is best approached through open discussion among the involved researchers, applying established authorship criteria based on relative contributions to the work, and involving a mentor or institutional resource if needed, rather than deciding the matter arbitrarily, by seniority alone, or by overall publication count unrelated to this specific project's contributions.