

PRACTICE EXAM 17: VA-BC SIMULATION (100 QUESTIONS)

This independent practice exam contains 100 four-option questions proportionally aligned to the VACC 2025 content outline. Choose the single best answer. For pacing practice, allow approximately 100 minutes. The official VA-BC examination contains 150 questions, 125 scored, with 2.5 hours of testing time. This publication is not affiliated with or endorsed by VACC or AVA.

1. The vascular access service is consulted after morning rounds. Based on this case, a patient needs six weeks of nonvesicant IV antibiotics and has poor peripheral veins. Which device best supports the anticipated therapy?

- A. A short peripheral catheter
- B. A steel-winged infusion set
- C. An arterial monitoring catheter
- D. A peripherally inserted central catheter

2. A nurse evaluates the patient before the next dose. Based on this case, which factor should carry the greatest weight when selecting a vascular access device?

- A. The inserter's favorite brand
- B. The prescribed therapy and anticipated duration
- C. The room in which care occurs
- D. The color of the catheter hub

3. The team compares the current findings with the baseline. Based on this case, a patient requires rapid, high-volume resuscitation. Which initial device is generally most appropriate?

- A. A large-bore short peripheral catheter
- B. A small-gauge midline catheter

- C. A tunneled central catheter
- D. An implanted infusion port

4. A clinician reviews the case with an experienced preceptor. Based on this case, which device is intended for repeated long-term intermittent access while remaining completely beneath the skin when not accessed?

- A. A nontunneled central catheter
- B. A standard midline catheter
- C. An implanted vascular access port
- D. A short peripheral catheter

5. The patient and clinician discuss the available access options. Based on this case, a medication is known to injure tissue if extravasated. which is the safest selection principle?

- A. Choose access appropriate for vesicant administration
- B. Use the smallest visible hand vein
- C. Select any device with blood return
- D. Choose the device requiring least documentation

6. A procedure nurse notices a potential safety issue. Based on this case, which patient is the strongest candidate for an intraosseous device?

- A. A stable patient needing monthly laboratory tests
- B. A home patient receiving long-term nutrition
- C. A critically ill patient needing immediate access after peripheral attempts fail
- D. A patient requesting a needle-free blood draw

7. An infusion-center clinician performs the scheduled assessment. Based on this case, what is a major advantage of a midline catheter compared with repeated short peripheral catheters?

- A. Guaranteed suitability for every vesicant
- B. Longer peripheral dwell without a central tip
- C. Placement of the tip in the right atrium
- D. Elimination of all infection risk

8. The vascular access specialist reviews a new order. Based on this case, before choosing an upper-extremity device for a patient with advanced kidney disease, what should the clinician prioritize?

- A. Use of the dominant arm for convenience
- B. Placement in the smallest distal vein
- C. Routine selection of a subclavian site
- D. Preservation of vessels that may be needed for dialysis

9. A home-infusion visit reveals a change in the care plan. Based on this case, which catheter feature most directly affects resistance to fluid flow?

- A. External hub color
- B. Dressing transparency
- C. Manufacturer logo size
- D. Internal radius and catheter length

10. The bedside team asks for the safest immediate recommendation. Based on this case, a child needs brief isotonic hydration with healthy forearm veins. Which choice follows the least-invasive principle?

- A. A tunneled central venous catheter
- B. An implanted chest port
- C. A short peripheral IV catheter
- D. A hemodialysis catheter

11. A clinician prepares the patient for a planned intervention. Based on this case, which device is designed specifically to support extracorporeal hemodialysis blood flow?

- A. A large-bore dual-lumen dialysis catheter
- B. A single-lumen midline catheter
- C. A small short peripheral catheter
- D. A standard implanted medication port

12. A quality meeting examines how the case should have been managed. Based on this case, a patient will receive continuous parenteral nutrition with high osmolarity. Which access is most appropriate?

- A. A small vein on the back of the hand
- B. Central venous access with an appropriate tip location
- C. A routine subcutaneous infusion set
- D. An arterial catheter in the wrist

13. An inserter reviews anatomy and device requirements. Based on this case, why should the minimum necessary number of catheter lumens be selected?

- A. Extra lumens always increase infusion speed
- B. Multiple lumens prevent all incompatibilities
- C. Unused lumens require no maintenance
- D. Each additional lumen can add manipulation and infection risk

14. A nurse checks the line before reconnecting therapy. Based on this case, which assessment best distinguishes a midline from a PICC?

- A. The terminal tip location
- B. The color of the extension tubing
- C. Whether ultrasound was used
- D. The presence of a stabilization device

15. The patient reports a new concern about the access device. Based on this case, before insertion, which history finding most directly changes site selection?

- A. The patient's preferred television channel
- B. Prior lymph-node surgery on the proposed side
- C. A remote ankle sprain
- D. The time of the last meal

16. An educator uses the case to assess staff competency. Based on this case, which finding suggests that a visible vein may still be unsuitable for cannulation?

- A. It refills after gentle release
- B. It follows a straight course
- C. It is hard, cordlike, and tender
- D. It is compressible on ultrasound

17. The care team must preserve future vascular access options. Based on this case, what should be assessed before using a limb with an arteriovenous fistula for routine venipuncture?

- A. Whether the patient is right-handed
- B. Whether the room has a recliner
- C. Whether the limb must be preserved from puncture and compression
- D. Whether the catheter package is blue

18. A clinician identifies a break from expected practice. Based on this case, a patient reports adhesive allergy. which is the best preinsertion response?

- A. Proceed with standard products and reassess later
- B. Plan compatible skin-preparation and securement products
- C. Avoid documenting the allergy
- D. Select a larger catheter to compensate

19. The multidisciplinary team reviews the next treatment phase. Based on this case, which bedside observation is most concerning before placing a peripheral catheter in an arm?

- A. Warm hands with equal pulses
- B. Symmetric skin color
- C. Full painless range of motion
- D. Unilateral swelling with collateral veins

20. A specialist is asked to resolve an access-related problem. Based on this case, why is a medication list relevant to vascular access assessment?

- A. Anticoagulants and infusate properties alter bleeding and device risks
- B. Only oral drugs affect vein visibility
- C. Medication history replaces physical assessment
- D. Medication names determine catheter color

21. The vascular access service is consulted after morning rounds. Based on this case, which ultrasound characteristic identifies a vein rather than an artery?

- A. The vessel has a thick pulsating wall
- B. The vessel compresses with gentle probe pressure
- C. The vessel remains round under pressure
- D. The vessel lies beside a nerve bundle

22. A nurse evaluates the patient before the next dose. Based on this case, what is the best response when a patient cannot explain the planned procedure in their own words?

- A. Obtain equipment and begin quickly
- B. Ask a family member to consent automatically
- C. Pause and provide understandable education before proceeding
- D. Document refusal without further discussion

23. The team compares the current findings with the baseline. Based on this case, which assessment is most important when choosing a peripheral insertion site near a joint?

- A. How movement may affect stability and complications
- B. Whether the patient likes the site
- C. Whether the vein is closest to the bed
- D. How easily the site can be hidden

24. A clinician reviews the case with an experienced preceptor. Based on this case, a patient has extensive burns on both arms. which is the safest next step?

- A. Insert through burned tissue immediately
- B. Use any blistered site with a transparent dressing
- C. Delay all necessary therapy indefinitely
- D. Escalate for an individualized access plan using unaffected options

25. The patient and clinician discuss the available access options. Based on this case, which patient statement requires follow-up before a contrast injection through an existing device?

- A. The dressing was changed two days ago
- B. This catheter has been difficult to flush since yesterday
- C. The extension set is labeled
- D. The device was placed with ultrasound

26. A procedure nurse notices a potential safety issue. Based on this case, what does a focused neurovascular assessment distal to a proposed arm site include?

- A. Color, temperature, sensation, movement, and perfusion
- B. Only the patient's pain score
- C. Only the vein's visible diameter
- D. Room temperature and humidity

27. An infusion-center clinician performs the scheduled assessment. Based on this case, a patient has a history of difficult access. Which approach best supports assessment?

- A. Repeat blind attempts in the same area
- B. Choose the first palpable structure
- C. Avoid asking about previous experiences
- D. Review prior successful sites and use visualization technology when indicated

28. The vascular access specialist reviews a new order. Based on this case, which finding is most consistent with dehydration affecting peripheral access?

- A. Bounding symmetric peripheral veins
- B. Generalized bruising without volume loss
- C. Poorly filled veins and reduced skin turgor
- D. Warmth limited to one insertion site

29. A home-infusion visit reveals a change in the care plan. Based on this case, why should the clinician ask about previous central venous thrombosis?

- A. It determines the patient's pain tolerance
- B. It may alter vessel patency and future access planning
- C. It identifies the preferred dressing brand
- D. It guarantees contralateral patency

30. The bedside team asks for the safest immediate recommendation. Based on this case, which laboratory issue deserves attention before a nonemergent invasive line procedure?

- A. A normal sodium concentration
- B. A stable hemoglobin result
- C. A negative pregnancy test alone
- D. A clinically significant coagulation abnormality

31. A clinician prepares the patient for a planned intervention. Based on this case, what is the best way to include a patient with limited English proficiency in planning?

- A. Use a qualified medical interpreter and speak directly to the patient
- B. Rely on an untrained child to interpret
- C. Use gestures as the only explanation
- D. Ask staff to decide without the patient

32. A quality meeting examines how the case should have been managed. Based on this case, a patient becomes pale and diaphoretic while discussing needle insertion. which action should the clinician anticipate?

- A. Definite bloodstream infection
- B. Immediate catheter embolization
- C. A possible vasovagal response requiring safety measures
- D. A delayed adhesive allergy

33. An inserter reviews anatomy and device requirements. Based on this case, what is the most important action immediately before handling sterile insertion supplies?

- A. Apply clean gloves over unwashed hands
- B. Open every package in the room
- C. Perform hand hygiene using the indicated method
- D. Palpate the site after antisepsis

34. A nurse checks the line before reconnecting therapy. Based on this case, how should a clinician respond to visible soil at the intended insertion site?

- A. Apply extra dressing over the soil
- B. Insert through the soiled area quickly
- C. Skip antisepsis to avoid irritation
- D. Clean the area before applying the skin antiseptic

35. The patient reports a new concern about the access device. Based on this case, which action best protects a sterile field?

- A. Turn away while others approach the field
- B. Keep sterile items within view and above waist level
- C. Reach across the field with bare sleeves
- D. Place the field below bed height

36. An educator uses the case to assess staff competency. Based on this case, what should happen if the antiseptic has not dried before puncture?

- A. Wait until it dries completely
- B. Blot it with nonsterile gauze
- C. Fan it with a gloved hand
- D. Insert while it remains wet

37. The care team must preserve future vascular access options. Based on this case, which preparation reduces wrong-device errors?

- A. Open several catheter packages before checking the verified plan
- B. Match the selected device and supplies to the verified order and plan
- C. Rely on memory rather than labels and the verified order
- D. Ask the patient to choose the catheter and supplies alone

38. A clinician identifies a break from expected practice. Based on this case, why should emergency equipment be available for selected line procedures?

- A. It replaces preprocedure assessment
- B. It eliminates the need for monitoring
- C. It permits untrained insertion
- D. Some patients may develop acute reactions or instability

39. The multidisciplinary team reviews the next treatment phase. Based on this case, what is the safest way to prepare a needleless connector for access?

- A. Disinfect the connection surface with friction and allow it to dry
- B. Touch the surface to confirm dryness
- C. Rinse it with tap water
- D. Cover it with a used alcohol pad

40. A specialist is asked to resolve an access-related problem. Based on this case, before placing a central device, how should the procedure team address roles?

- A. Wait for complications to assign tasks
- B. Allow each person to assume the plan
- C. Conduct a briefing that confirms roles, site, device, and contingencies
- D. Limit communication to the inserter

41. The vascular access service is consulted after morning rounds. Based on this case, which action maintains patient identification during preparation?

- A. Use the room number as the sole identifier
- B. Use two approved identifiers matched to the order
- C. Ask another patient to confirm the name
- D. Rely only on facial recognition

42. A nurse evaluates the patient before the next dose. Based on this case, what should the clinician do with a package that is wet, torn, or expired?

- A. Dry it and use it if contents look clean
- B. Tape the tear before opening
- C. Remove it from use and obtain an intact in-date item
- D. Use it only for central access

43. The team compares the current findings with the baseline. Based on this case, why is patient positioning planned before sterile barriers are applied?

- A. Position has no effect after site selection
- B. Movement makes ultrasound more accurate
- C. Repositioning always preserves sterility
- D. Correct positioning improves access and avoids later field disruption

44. A clinician reviews the case with an experienced preceptor. Based on this case, during ultrasound-guided insertion, what confirms the needle tip rather than only the shaft?

- A. Continuous visualization of the advancing tip entering the target
- B. A bright line anywhere on the screen
- C. Movement of tissue near the vessel
- D. Seeing the catheter package beside the probe

45. The patient and clinician discuss the available access options. Based on this case, what is the safest response after an unsuccessful peripheral attempt?

- A. Recap the needle for another attempt
- B. Activate the safety device and discard the needle immediately
- C. Leave the needle on the bed
- D. Reuse it at a nearby site

46. A procedure nurse notices a potential safety issue. Based on this case, why should excessive force never be used when advancing a catheter?

- A. Force guarantees central tip placement
- B. Force prevents vessel spasm
- C. Resistance may indicate malposition or contact with tissue
- D. Resistance proves the vein is large

47. An infusion-center clinician performs the scheduled assessment. Based on this case, what is the purpose of maximal sterile barriers during central venous catheter insertion?

- A. Improve ultrasound image brightness
- B. Increase catheter flow rate
- C. Prevent every mechanical complication
- D. Reduce microbial contamination of the insertion field and device

48. The vascular access specialist reviews a new order. Based on this case, a guidewire cannot be withdrawn easily. which action should the inserter do?

- A. Cut the wire at skin level
- B. Advance the catheter with greater force
- C. Ask the patient to cough while pulling hard
- D. Stop and evaluate rather than pulling forcefully

49. A home-infusion visit reveals a change in the care plan. Based on this case, which action helps prevent air entry during central line insertion or exchange?

- A. Use appropriate positioning and promptly occlude open hubs
- B. Leave lumens open to equalize pressure
- C. Ask the patient to sit upright abruptly
- D. Disconnect tubing during inspiration

50. The bedside team asks for the safest immediate recommendation. Based on this case, what finding confirms successful peripheral venous entry before catheter advancement?

- A. A pulse beneath the catheter
- B. Appropriate blood return with anatomic and tactile confirmation
- C. Severe radiating pain
- D. Resistance during flushing

51. A clinician prepares the patient for a planned intervention. Based on this case, why is a catheter-over-needle device advanced after lowering the insertion angle?

- A. To follow the vessel lumen and reduce posterior-wall injury
- B. To enter the artery intentionally
- C. To increase skin traction
- D. To make the catheter stiffer

52. A quality meeting examines how the case should have been managed. Based on this case, what should occur if sterile technique is broken during insertion?

- A. Continue if the patient did not notice
- B. Cover the contaminated area with gauze
- C. Stop and replace contaminated items before continuing
- D. Document it only after completion

53. An inserter reviews anatomy and device requirements. Based on this case, which symptom during advancement requires immediate cessation and assessment?

- A. Mild awareness of skin cleansing
- B. Sharp radiating pain or new paresthesia
- C. Temporary coolness from antiseptic
- D. Concern about the procedure duration

54. A nurse checks the line before reconnecting therapy. Based on this case, after insertion, what is the priority before using a newly placed central catheter?

- A. Use every lumen immediately to confirm flow before assessment
- B. Assume blood return alone proves a safe central tip position
- C. Wait until the next scheduled dressing change before any use
- D. Verify tip location and rule out relevant complications by an approved method

55. The patient reports a new concern about the access device. Based on this case, what is the best reason to assess the insertion site at regular intervals?

- A. Early recognition of infection, infiltration, and device dysfunction
- B. To loosen the dressing routinely
- C. To eliminate documentation
- D. To increase the number of line entries

56. An educator uses the case to assess staff competency. Based on this case, a transparent dressing is damp and lifting at the edge. which action should the clinician do?

- A. Reinforce every edge indefinitely
- B. Leave it until the scheduled date
- C. Replace it using aseptic technique
- D. Remove it and leave the site uncovered

57. The care team must preserve future vascular access options. Based on this case, why should an unused catheter lumen remain clamped or use the designed valve system?

- A. To increase bacterial growth
- B. To make the catheter longer
- C. To replace flushing
- D. To prevent unintended blood reflux and air entry

58. A clinician identifies a break from expected practice. Based on this case, what is the safest response to resistance while flushing a catheter?

- A. Apply greater syringe pressure
- B. Stop and assess the system and patient
- C. Use a smaller syringe to increase force
- D. Continue until the occlusion clears

59. The multidisciplinary team reviews the next treatment phase. Based on this case, which practice best reduces contamination when changing an administration set?

- A. Maintain aseptic non-touch technique at critical connections
- B. Place open ends on the bed
- C. Reuse protective caps
- D. Touch connection tips with sterile gloves repeatedly

60. A specialist is asked to resolve an access-related problem. Based on this case, why is daily review of central-line necessity important?

- A. It guarantees a line will never occlude
- B. It replaces site assessment
- C. Prompt removal reduces exposure to device-related harm
- D. It determines the brand of dressing

61. The vascular access service is consulted after morning rounds. Based on this case, what is the preferred action when dried blood obscures an insertion site?

- A. Scrape beneath the intact dressing
- B. Ignore it if the line flushes
- C. Change the dressing and clean the site using aseptic technique
- D. Add opaque tape over the area

62. A nurse evaluates the patient before the next dose. Based on this case, how should a needleless connector be accessed for medication administration?

- A. Wipe it after connecting the syringe
- B. Disinfect it, allow drying, and use a sterile connection
- C. Touch it to check for residue
- D. Skip disinfection if a cap was present

63. The team compares the current findings with the baseline. Based on this case, what is the main purpose of catheter stabilization?

- A. Compress the vein until flow stops
- B. Hide the site from view
- C. Replace the primary dressing
- D. Limit movement that contributes to dislodgment and vessel trauma

64. A clinician reviews the case with an experienced preceptor. Based on this case, a patient showers with a central line. What principle guides protection?

- A. Keep the catheter and connections from direct water exposure
- B. Submerge the dressing to clean it
- C. Disconnect the tubing before showering
- D. Remove the dressing temporarily

65. The patient and clinician discuss the available access options. Based on this case, why should blood sampling from a vascular access device follow an established sequence?

- A. To reduce contamination and preserve sample accuracy and device function
- B. To make every laboratory test require a routine discard volume
- C. To eliminate patient identification during collection from the device
- D. To avoid flushing the device after the specimen is collected

66. A procedure nurse notices a potential safety issue. Based on this case, what indicates that home-care teaching was effective?

- A. The patient signs the form without questions
- B. The clinician reads the instructions aloud
- C. A family member stores supplies
- D. The patient correctly demonstrates care and states warning signs

67. An infusion-center clinician performs the scheduled assessment. Based on this case, what is the safest practice for accessing an implanted port?

- A. Use a standard hypodermic needle
- B. Insert beside the septum
- C. Use a noncoring needle of appropriate length
- D. Leave the port accessed without securement

68. The vascular access specialist reviews a new order. Based on this case, when should a short peripheral catheter be removed?

- A. Only after a fixed universal dwell time
- B. When no longer needed or when complications occur
- C. Whenever blood return is absent despite easy infusion
- D. Only when the patient requests discharge

69. A home-infusion visit reveals a change in the care plan. Based on this case, a peripheral site is cool, swollen, and painful during infusion. What is the priority action?

- A. Increase the infusion rate
- B. Apply a new dressing over swelling
- C. Flush forcefully to restore flow
- D. Stop the infusion and assess for infiltration

70. The bedside team asks for the safest immediate recommendation. Based on this case, a vesicant infusion causes burning and swelling. which action should the clinician do first?

- A. Flush the medication into the vein
- B. Remove the catheter before any assessment
- C. Stop the infusion while leaving the device available for aspiration
- D. Massage the affected tissue vigorously

71. A clinician prepares the patient for a planned intervention. Based on this case, which finding most strongly suggests phlebitis?

- A. Erythema, warmth, tenderness, and a palpable venous cord
- B. Cool painless edema around the site
- C. A silent infusion pump
- D. Clear fluid under an intact dressing

72. A quality meeting examines how the case should have been managed. Based on this case, a central catheter suddenly lacks blood return but flushes without resistance. which action should be assessed first?

- A. Immediate catheter removal without evaluation
- B. Mechanical causes such as position, clamps, or kinking
- C. Forceful irrigation with a small syringe
- D. Routine use for every vesicant

73. An inserter reviews anatomy and device requirements. Based on this case, what symptom pattern raises concern for an air embolism?

- A. Gradual itching beneath an old dressing
- B. Localized bruising after venipuncture
- C. Mild hunger before lunch
- D. Sudden dyspnea, chest discomfort, and hemodynamic change

74. A nurse checks the line before reconnecting therapy. Based on this case, a patient with a central line has fever and chills during infusion. which is the best response?

- A. Stop and assess promptly for infection or infusion reaction
- B. Increase the rate to finish quickly
- C. Change only the tubing label
- D. Assume the symptoms are unrelated

75. The patient reports a new concern about the access device. Based on this case, which finding suggests catheter migration?

- A. An unchanged securement device
- B. A changed external catheter length with new infusion dysfunction
- C. A clean and dry dressing
- D. A stable heart rate

76. An educator uses the case to assess staff competency. Based on this case, what should be done when catheter fracture is suspected?

- A. Flush to locate the break
- B. Pull forcefully on the exposed segment
- C. Stop use, secure the device, and obtain urgent evaluation
- D. Cover it and continue infusion

77. The care team must preserve future vascular access options. Based on this case, a patient develops arm swelling and discomfort on the side of a PICC. What complication should be considered?

- A. Simple dehydration
- B. Catheter-associated venous thrombosis
- C. Arterial hypertension alone
- D. Adhesive dryness

78. A clinician identifies a break from expected practice. Based on this case, a pump repeatedly alarms for occlusion. which is the safest first check?

- A. Raise the pressure limit repeatedly
- B. Flush against resistance
- C. Inspect clamps, tubing, connections, and limb position
- D. Replace the pump without assessing the patient

79. The multidisciplinary team reviews the next treatment phase. Based on this case, which sign after subclavian central insertion may indicate pneumothorax?

- A. New dyspnea with unequal breath sounds
- B. A small spot of blood on gauze
- C. Mild adhesive discomfort
- D. Transient anxiety before insertion

80. A specialist is asked to resolve an access-related problem. Based on this case, what is the best response to persistent bleeding at a newly inserted site?

- A. Remove all dressings and simply observe the site without pressure
- B. Ignore the bleeding if the catheter continues to flush normally
- C. Advance the catheter farther into the vessel to control bleeding
- D. Apply appropriate pressure and assess bleeding risk while escalating care

81. The vascular access service is consulted after morning rounds. Based on this case, a patient reports electric-shock pain during flushing. which action should the clinician do?

- A. Flush faster to overcome spasm
- B. Stop use and evaluate for malposition or nerve involvement
- C. Reassure the patient that it is normal
- D. Apply heat and continue therapy

82. A nurse evaluates the patient before the next dose. Based on this case, what distinguishes infiltration from extravasation?

- A. Infiltration always causes systemic sepsis
- B. Extravasation occurs only in arteries
- C. Infiltration always produces a blister
- D. Extravasation involves a vesicant or irritant capable of tissue injury

83. The team compares the current findings with the baseline. Based on this case, a connector repeatedly loosens from extension tubing. which is the safest solution?

- A. Stop use and replace the faulty components using aseptic technique
- B. Tighten it with an unapproved adhesive
- C. Wrap the junction permanently with cloth tape
- D. Ignore it if no leak is visible

84. A clinician reviews the case with an experienced preceptor. Based on this case, which action is appropriate for suspected catheter-related bloodstream infection?

- A. Culture only the catheter dressing and delay assessment of the patient
- B. Begin an infusion through every lumen before obtaining ordered cultures
- C. Follow the ordered diagnostic and treatment pathway without routinely removing every line
- D. Delay assessment and diagnostic action until the next scheduled shift

85. The patient and clinician discuss the available access options. Based on this case, what is the strongest basis for revising a vascular access policy?

- A. Current evidence, standards, outcomes, and stakeholder review
- B. A single vendor's marketing claim
- C. One clinician's habit
- D. The age of the existing font

86. A procedure nurse notices a potential safety issue. Based on this case, a unit's infiltration rate rises. which is the best first quality-improvement step?

- A. Purchase a new device immediately
- B. Define the measure and examine reliable baseline data
- C. Discipline the last inserter
- D. Stop reporting infiltrations

87. An infusion-center clinician performs the scheduled assessment. Based on this case, why is competency validation more useful than attendance alone?

- A. It guarantees lifelong expertise after one successful classroom session
- B. It eliminates the need for supervision during every future procedure
- C. It proves that every later patient outcome will be completely perfect
- D. It demonstrates the learner can perform required knowledge and skills

88. The vascular access specialist reviews a new order. Based on this case, which action best reflects evidence-based practice?

- A. Follow tradition despite contrary evidence
- B. Use the newest product automatically
- C. Combine best evidence with expertise and patient values
- D. Apply research without considering the patient

89. A home-infusion visit reveals a change in the care plan. Based on this case, what is the purpose of reporting a near miss?

- A. Identify system vulnerabilities before patient harm occurs
- B. Assign blame without investigation
- C. Increase documentation burden only
- D. Remove the event from quality data

90. The bedside team asks for the safest immediate recommendation. Based on this case, which study feature generally strengthens confidence that an intervention caused an outcome?

- A. A testimonial from one user
- B. A well-designed comparison with control of bias and confounding
- C. An advertisement without methods
- D. An opinion lacking data

91. A clinician prepares the patient for a planned intervention. Based on this case, how should a vascular access specialist respond to a practice outside personal competence?

- A. Perform it once without support
- B. Delegate it to an untrained person
- C. Seek qualified assistance and remain within authorized scope
- D. Hide the knowledge gap

92. A quality meeting examines how the case should have been managed. Based on this case, what makes an audit-and-feedback program useful?

- A. Collecting data without sharing results
- B. Comparing units with different definitions
- C. Reporting only favorable outcomes
- D. Timely credible data linked to specific improvement actions

93. An inserter reviews anatomy and device requirements. Based on this case, a competent patient refuses a recommended central line after education. which action should the clinician do?

- A. Respect the refusal, document the discussion, and notify the care team
- B. Proceed because the clinician believes it is best
- C. Ask security to hold the patient
- D. Obtain consent from any visitor

94. A nurse checks the line before reconnecting therapy. Based on this case, which action best protects patient confidentiality during bedside teaching?

- A. Post the plan in a public hallway
- B. Discuss only necessary information where unintended listeners are minimized
- C. Share details with curious visitors
- D. Use identifiable cases on social media

95. The patient reports a new concern about the access device. Based on this case, a patient asks whether the inserter has performed the procedure before. What is the most ethical response?

- A. Provide a misleading assurance
- B. Refuse to discuss clinician competence
- C. Change the subject and begin
- D. Answer honestly and explain available supervision or support

96. An educator uses the case to assess staff competency. Based on this case, what ethical principle is most directly served by preventing avoidable catheter harm?

- A. Fidelity to a vendor
- B. Personal convenience
- C. Nonmaleficence
- D. Institutional secrecy

97. The care team must preserve future vascular access options. Based on this case, when may a surrogate participate in vascular access decisions?

- A. Whenever the surrogate disagrees with a capable patient
- B. Whenever staff prefer faster consent
- C. Only after the procedure is completed
- D. When authorized and the patient lacks decision-making capacity for the choice

98. A clinician identifies a break from expected practice. Based on this case, what is the best response after discovering a vascular access error?

- A. Alter the record to reduce concern
- B. Wait to see whether harm appears
- C. Address immediate safety, disclose through proper channels, and report accurately
- D. Discuss it publicly with unrelated staff

99. The multidisciplinary team reviews the next treatment phase. Based on this case, a clinician is asked to insert a device without required competency validation. which action should the clinician do?

- A. Proceed because staffing is short
- B. Decline unsupervised performance and seek an authorized qualified pathway
- C. Ask the patient to accept the risk
- D. Document competency after the procedure

100. A specialist is asked to resolve an access-related problem. Based on this case, what is required for informed consent to be meaningful?

- A. Relevant information, capacity, understanding, and voluntary choice
- B. A signature obtained after sedation
- C. Agreement caused by coercion
- D. Technical language without questions

Practice Exam 17: Answer Key and Explanations

1. D — A PICC provides durable central access for prolonged therapy while avoiding repeated short peripheral insertions. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

2. B — Device choice begins with clinical need, infusate characteristics, duration, vascular health, and the least invasive suitable option. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

3. A — A short, large-bore peripheral catheter offers low resistance and rapid access for urgent volume replacement. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

4. C — An implanted port is fully subcutaneous and suits long-term intermittent therapy when access frequency justifies needle entry. The other choices do not match the intended dwell, infusate, flow

demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

5. A — Vesicant risk must influence device and tip-location selection because blood return alone does not establish safe administration conditions. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

6. C — Intraosseous access is an emergency bridge when rapid vascular access is essential and conventional peripheral access cannot be obtained promptly. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

7. B — A midline can reduce repeated venipunctures during suitable peripheral therapy, but its tip remains peripheral and limitations still apply. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

8. D — Vessel preservation planning is essential because future hemodialysis access may depend on intact upper-extremity veins. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

9. D — Flow resistance falls with a larger internal radius and shorter length, so catheter dimensions matter more than cosmetic features. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

10. C — Short, nonirritating therapy with adequate peripheral veins usually calls for a short peripheral catheter rather than central access. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

11. A — Dialysis catheters have large lumens and configurations intended for high extracorporeal blood-flow requirements. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

12. B — Central circulation provides rapid hemodilution for hyperosmolar parenteral nutrition and reduces local peripheral endothelial injury. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

13. D — Selecting only needed lumens reduces access points, manipulation, maintenance burden, and opportunities for contamination. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

14. A — Device category is defined largely by where the catheter terminates; a midline remains peripheral, whereas a PICC terminates centrally. The other choices do not match the intended dwell, infusate, flow demand, vessel-preservation goal, or least-invasive suitable-device principle. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

15. B — Prior lymphatic surgery can affect drainage and risk, so it must be considered with current policy and the patient's overall condition. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the.

16. C — A firm, tender, cordlike vein suggests inflammation or thrombosis and should not be selected merely because it is visible. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response.

17. C — A fistula limb is generally protected because puncture, compression, and trauma can threaten essential dialysis access. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

18. B — Allergy assessment should change the product plan before exposure and should be documented for the whole care team. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

19. D — Unilateral edema and collateral veins may indicate impaired venous return and warrant further assessment rather than routine cannulation. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

20. A — Medications can influence bleeding, compatibility, vessel irritation, therapy duration, and monitoring needs, making the list central to planning. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

21. B — Veins typically compress with gentle pressure, while arteries remain patent and pulsatile; Doppler can further clarify uncertain anatomy. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

22. C — Inability to teach back key information signals incomplete understanding and requires clarification before valid participation or consent. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

23. A — Joint movement can cause catheter pistoning, dislodgment, occlusion, and dressing disruption, so stability and function matter. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

24. D — Burned or infected skin is a poor insertion field; the clinician should evaluate alternative sites and devices based on urgency and expertise. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess.

25. B — Resistance or dysfunction requires assessment before power injection because catheter integrity, patency, and device rating must be established. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

26. A — A distal neurovascular baseline supports site selection and later recognition of impaired circulation or nerve symptoms. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

27. D — Prior access history and appropriate technology can reduce attempts, preserve vessels, and improve the patient experience. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The

clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

28. C — Volume depletion can reduce peripheral venous filling, which may affect device and technique choices. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

29. B — Previous thrombosis can leave stenosis or occlusion, so access planning may require imaging, alternatives, or specialty consultation. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

30. D — Bleeding risk should be assessed in clinical context, including coagulation status, medications, urgency, and compressibility of the proposed site. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response.

31. A — Qualified interpretation supports accurate history, informed participation, privacy, and safer education while preserving direct communication with the patient. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after.

32. C — Pallor, sweating, nausea, and lightheadedness around needles may precede syncope, so positioning and injury prevention are priorities. The remaining findings are less relevant to immediate site or device safety and should not replace a complete history, physical assessment, and patient discussion. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

33. C — Hand hygiene reduces transient organisms and precedes preparation and glove use; gloves do not replace it. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

34. D — Visible contamination must be removed so the antiseptic can contact skin effectively and the procedure begins with a clean field. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

35. B — A sterile field must remain visible and controlled; out-of-view or low surfaces are considered vulnerable to contamination. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

36. A — Drying allows the antiseptic its intended contact action and reduces chemical irritation and fire risk where applicable. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

37. B — A deliberate preprocedure check aligns the prescription, assessment, device, accessories, and planned technique before sterility limits correction. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

38. D — Readiness for predictable complications supports timely response but does not replace assessment, competence, or monitoring. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

39. A — Mechanical friction, appropriate antiseptic, and drying reduce organisms at the access surface before connection. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

40. C — A brief team pause creates shared understanding, catches discrepancies, and prepares responses before sterile work begins. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

41. B — Two approved identifiers reduce wrong-patient procedures; room location is not a reliable identifier. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

42. C — Package integrity and expiration are prerequisites for relying on sterility; appearance alone cannot prove safety. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the

relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

43. D — Planning position supports anatomy, comfort, respiratory tolerance, and stable sterile technique without unnecessary movement after preparation. The alternatives weaken asepsis, identification, equipment integrity, team readiness, or patient understanding before the procedure has safely begun. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

44. A — Tip tracking is essential because the shaft may appear aligned while the unseen tip enters another structure. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

45. B — Immediate activation and disposal prevent needlestick injury and reuse; a new sterile device is required for another attempt. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

46. C — Unexpected resistance requires reassessment because force can damage the vessel, catheter, guidewire, or surrounding structures. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

47. D — Comprehensive barriers reduce contamination during a high-risk procedure, but they do not replace hand hygiene, antisepsis, or competent technique. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

48. D — Wire resistance may signal entrapment, kinking, or device interaction; force can fracture or embolize the wire. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

49. A — Controlling open connections and using procedure-specific positioning reduce the pressure gradient that can draw air into the venous system. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

50. B — Blood return plus proper needle visualization or feel supports venous entry; pain, pulsation, or resistance requires reassessment. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

51. A — Lowering the angle after venous entry aligns advancement with the vessel rather than driving the needle through the back wall. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

52. C — A recognized break requires immediate correction because later documentation cannot undo contamination introduced during insertion. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

53. B — Radiating pain or paresthesia may indicate nerve contact or injury; continuing advancement could worsen harm. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

54. D — Central device use depends on validated tip position and procedure-specific complication assessment, not blood return alone. The incorrect actions rely on force, incomplete visualization, or contaminated technique and can increase vessel, nerve, device, or bloodstream risk. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

55. A — Regular assessment detects evolving complications before they become severe and guides continued need and device management. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

56. C — A compromised dressing no longer provides reliable protection and should be replaced with appropriate skin antisepsis and securement. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

57. D — Proper closure helps maintain a closed system and device function; it does not eliminate required assessment and flushing. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician

should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

58. B — Forceful flushing can rupture the catheter or dislodge material; resistance requires evaluation of clamps, tubing, position, and complications. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

59. A — Aseptic non-touch technique keeps critical parts from contact and limits microorganisms introduced during system changes. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

60. C — Every unnecessary catheter day prolongs risk; review links ongoing need to timely removal and alternative access planning. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

61. C — Obscured visualization and accumulated blood warrant dressing care so the site can be assessed and protected. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

62. B — The connection surface must be disinfected before access because protective caps and appearance do not guarantee an aseptic surface. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

63. D — Effective stabilization reduces pistoning, migration, phlebitis, and accidental removal while preserving site assessment. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

64. A — Water can contaminate dressings and connections, so a secure water-resistant barrier and policy-based instructions are required. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

65. A — A defined process addresses identification, infusions, waste or discard when indicated, order of draw, flushing, and reconnection. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

66. D — Teach-back and return demonstration reveal actual understanding better than signatures or passive exposure. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

67. C — A noncoring needle preserves septum integrity; correct length and securement support reliable chamber access. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

68. B — Clinical indication and complication assessment guide removal; unnecessary devices should not remain solely to meet a routine schedule. The alternatives compromise the closed system, obscure assessment, increase manipulation, or allow an unnecessary or dysfunctional device to remain in use. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

69. D — Cool swelling and pain suggest infiltration; stopping infusion limits further tissue exposure while the clinician evaluates and treats appropriately. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

70. C — Suspected extravasation requires stopping administration and preserving access initially for aspiration or antidote steps under the agent-specific protocol. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

71. A — Inflammation along the vein produces pain, erythema, warmth, swelling, and sometimes a cordlike vessel. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

72. B — Position-dependent or external mechanical causes should be excluded before assuming intraluminal occlusion or using the line for high-risk therapy. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm.

The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

73. D — Abrupt cardiopulmonary or neurologic symptoms during an open-line event require immediate emergency response for possible air embolism. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

74. A — Systemic symptoms associated with infusion require prompt assessment, cultures or other actions as ordered, and patient stabilization. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

75. B — A change in external length may reflect inward or outward migration and requires cessation of inappropriate use and tip evaluation. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

76. C — Suspected damage risks leakage, embolization, or contamination; device use stops while the segment is secured and expert help obtained. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

77. B — Unilateral swelling, pain, and venous congestion with a PICC warrant evaluation for thrombosis and other flow obstruction. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

78. C — External and positional causes are checked first, followed by patient and device assessment; pressure should not override unexplained resistance. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

79. A — Respiratory distress and asymmetric breath sounds after chest-region access require immediate evaluation for pleural injury. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

80. D — Hemostasis, patient assessment, medication and coagulation review, and escalation address both local bleeding and underlying risk. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

81. B — Sharp radiating symptoms are not expected and may signal migration, mechanical injury, or nerve irritation requiring immediate assessment. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

82. D — Both involve unintended tissue leakage, but extravasation specifically raises the risk of significant injury from the infusate. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

83. A — An unreliable connection threatens sterility, air control, and dose delivery; compromised components should be replaced rather than improvised. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

84. C — Management depends on clinical stability, cultures, organism, device type, and complications; reflex actions without assessment may harm care. The distractors continue exposure, use unsafe pressure or manipulation, or delay the targeted assessment and escalation needed to limit harm. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

85. A — Policy revision should integrate appraised evidence, applicable standards, local data, resources, and interdisciplinary expertise. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

86. B — Improvement begins with an operational definition and trustworthy data so patterns, processes, and potential causes can be identified. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

87. D — Attendance documents exposure, while competency assessment evaluates performance against defined criteria and identifies remediation needs. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable

improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

88. C — Evidence-based practice integrates research, clinical judgment, feasibility, and informed patient preferences rather than relying on one input. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

89. A — Near misses reveal weak defenses and support learning, process redesign, and prevention even when no injury reaches the patient. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

90. B — Methodologic rigor, appropriate comparison, and bias control improve causal inference more than anecdote or promotional claims. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

91. C — Professional accountability includes recognizing limits, obtaining education or assistance, and practicing within law, policy, and demonstrated competence. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

92. D — Feedback supports change when measures are valid, understandable, timely, and paired with achievable actions and follow-up. The weaker choices substitute habit, blame, attendance, marketing, or unvalidated data for evidence, demonstrated competency, and measurable improvement. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

93. A — Autonomy permits an informed capable patient to refuse; the team should address alternatives, consequences, documentation, and ongoing care. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

94. B — Privacy requires limiting disclosure to legitimate purposes, appropriate recipients, and environments that reduce unnecessary exposure. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

95. D — Truthful communication supports informed choice and trust; the clinician should accurately describe preparation and supervision without exaggeration. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

96. C — Nonmaleficence is the obligation to avoid causing harm and underlies risk reduction, competent practice, and timely complication management. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

97. D — Surrogate authority applies according to law and policy when the patient cannot decide; a capable patient's choices remain primary. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

98. C — Ethical error response prioritizes the patient, truthful communication, accurate documentation, required reporting, and system learning. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

99. B — Scope and competence obligations are not suspended by staffing pressure; safe escalation protects the patient and clinician. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.

100. A — Consent is a communication process, not merely a signature; the patient needs understandable information, decisional ability, and freedom from coercion. The other responses undermine autonomy, privacy, honest communication, authorized decision-making, competence, or accurate reporting and therefore cannot be justified. The clinician should document the relevant findings, communicate the plan, and reassess the patient's response after the chosen intervention.