Vascular Access Certification Corporation (VACC)
Vascular Access Board Certified (VA-BC™) Examination
2020 Job Analysis
Approved Test Specification

Content Area	Percentage Weight	Number of Items
DOMAIN CATEGORY I: Clinical Knowledge and Application	**65%**	**81**
A. Device Assessment and Selection		
1. Central venous access devices		
2. Peripheral intravenous devices		
3. Dialysis, apheresis and aquapheresis catheters		
4. Intraosseous devices		
5. Arterial catheters		
6. Pulmonary artery catheters		
7. Device characteristics (e.g., single versus multi-lumen devices, optimal insertion and tip location)		
B. Patient Assessment		
1. Vascular pathology (e.g., impact of disease processes on vascular access)		
2. Device selection (e.g., infusion therapy, alternative to IV placement, vesicants and osmolality)		
3. Patient specific characteristics (e.g., compromised skin integrity, product reaction) and resources to maintain vascular access devices		
4. Imaging technology (e.g., ultrasound, transillumination, fluoroscopy / venogram, chest x-ray)		
C. Preparation		
1. Infection prevention procedures, concepts and principles (e.g., sterile field, aseptic non-touch technique [ANTT], common pathogens)		
2. Anatomy and physiology		
3. Growth and development implications		

Content Area	Percentage Weight	Number of Items
DOMAIN CATEGORY I (continued): Clinical Knowledge and Application	**65%**	**81**
D. Insertion		
1. Vascular access device and insertion components		
2. Insertion techniques (e.g., Modified Seldinger)		
3. Flushing and locking solutions / procedures		
4. Imaging technology (e.g., ultrasound, infra-red, transillumination)		
5. Laboratory values relevant to device placement and maintenance		
6. Tip location and confirmation systems		
7. Engineered securement devices		
8. Complications and emergency interventions (e.g., inadvertent arterial puncture, pneumothorax, catheter tip malposition, nerve injury)		
E. Care and Maintenance of Vascular Access		
1. Insertion / exit site assessment		
2. Lumen patency and catheter clearance (e.g., flushing protocol, occlusion therapy)		
3. Infusion equipment and add-on supplies (e.g., needleless connector)		
4. Dressing change procedure		
5. Patient / caregiver education		
6. Care plan throughout the healthcare continuum (e.g., catheter insertion information, care and maintenance instructions, patient restrictions)		
7. Vascular access device removal (e.g., removal length of PICC, removal complications, patient tolerance of removal procedure)		
F. Troubleshooting, Complications, and Interventions		
1. Post-insertion risks and complications (e.g., extravasation, thrombosis, infection, catheter tip migration, occlusion, nerve damage, phlebitis)		
2. Pharmacologic interventions (e.g., catheter clearance, antibiotic lock, ethanol lock, extravasation treatment)		
3. Catheter repair / exchange		
4. Other complications (e.g., central vein occlusion, internal fracture, compromised skin integrity)		

Content Area	Percentage Weight	Number of Items
DOMAIN CATEGORY II: Interpersonal and Communication Skills	**15%**	**18**
A. Interpersonal Communication		
1. Communication with patient / caregiver (e.g., risks, benefits and alternatives; device care; infection prevention)		
2. Communication with patient / caregiver with additional needs (e.g., developmental/ cognitive deficit, psychosocial concerns)		
3. Cultural competency (e.g., cultural and religious differences, family involvement, language barrier)		
4. Collaboration with patient's care team		
B. Mentoring and education		
1. Educational / staff development opportunities (e.g., quality improvement, hospital committees, early assessment for vessel preservation)		
2. Infection control measures and techniques		
DOMAIN CATEGORY III: Professional Development	**10%**	**13**
A. Evidence-based Practice and Continuing Education		
1. Evidence-based practice guidelines (e.g., AVA, INS, MAGIC, KDOQI, ACCP, SHEA)		
2. Process improvement initiatives and outcome evaluation (e.g., implementation of new techniques and / or products)		
3. Professional practice and development (e.g., seminars, webinars, conferences, certification)		
4. Critical analysis of published research (e.g., research methodologies)		

Content Area	Percentage Weight	Number of Items
DOMAIN CATEGORY IV: Legal and Ethical Considerations	**10%**	**13**
A. Legal Considerations		
1. Professional codes of conduct, professional guidelines, scope of practice and standards of care		
2. Legal principles in the practice of vascular access (e.g., consent, liability, HIPAA)		
3. Documentation requirements		
4. Manufacturer's guidelines for product use (e.g., Instructions for Use [IFUs], expiration dates, off-label use)		
B. Ethical Considerations		
1. Patient advocacy (e.g., patient preferences, end of life care)		
2. Reporting requirements (e.g., MAUDE database, Joint Commission [JC], state health department)		
3. Fiscal responsibility (e.g., accurate recording of charges, use of supplies and equipment, use of time)		
Total	**100%**	**125 items**