APCA Update: Spring 2018
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PHYSICIAN-ONLY CERTIFICATIONS

- RMSK: Registered in Musculoskeletal Sonography
- RPVI: Registered Physician in Vascular Interpretation
- CBCCT: Certification Board of Cardiovascular Computed Tomography
- CBNC: Certification Board of Nuclear Cardiology
- RPVI-China: Registered Physician in Vascular Interpretation in China
- Latin American Ultrasound Certificate Program
- Point-of-Care (POC) Ultrasound Academy

SONOGRAPHER CERTIFICATIONS

- RDMS Registered Diagnostic Medical Sonographer
- RDCS Registered Diagnostic Cardiac Sonographer
- RVT Registered Vascular Technologist
Physicians' Vascular Interpretation (PVI) Examination

• Pass to earn RPVI credential
• Tests basic vascular knowledge and skills essential to physicians practicing vascular surgery and vascular medicine
• Evaluates ability to interpret non-invasive vascular tests
• Requires applicants to understand:
  – Vascular anatomy and hemodynamics
  – Ultrasound physics and instrumentation
Overview

• Follow up from 2017 report to the APDVS
  – Survey of program directors followed
• Physician Vascular Interpretation (PVI) statistics
• Introduction of Point-of-Care Ultrasound (POCUS) certification
• PVI examination prerequisites
Follow-up from 2017 Report to APDVS

• Peripheral Vascular Interpretation (PVI) examination pass rates steadily declined from 92% in 2012 to 81% in 2016
• 2016 pass rate was 82% for vascular surgeons who indicated that they were taking the examination as a prerequisite for board certification (i.e. residents and fellows)
• Psychometric evaluation indicated that dropping pass rates were more likely to be related to who is taking the test, rather than changes in the examination content
Survey of Vascular Surgery Program Directors

• 53 integrated vascular surgery residencies and 107 fellowship programs
  – At many sites, a single PD in charge of both residency and fellowship program
• Total of 117 individuals invited to participate
• 61 of 117 invited PDs participated (51.7% response rate)

Tanious A et al. SCVS 2018
Program Directors’ Credentials

• Search of the APCA database found 54 of 117 PDs (46%) had current RPVI, RVT, or both credentials

• **Survey participants**, as a group, were more likely to have a vascular laboratory credential
  – 44 individuals (72% of responders) reported they had the RPVI or RVT credential

• 27% of survey respondents reported that entire faculty had either the RPVI or RVT credential
Survey Findings - Highlights

- 48% of programs provided a dedicated vascular laboratory rotation
- Most programs incorporate vascular laboratory education into their curriculum (63%) and/or provide access to an electronic review course (56%)
- Practical vascular laboratory interpretation experience reported to be 20 hours or less by 62% of respondents
Physician Vascular Interpretation
PVI by the Numbers: Certifications Issued

RPVI Granted by Specialty Since 2012

Individuals with current “active” certifications only; March, 2018
PVI by the Numbers: Certifications Issued

Cumulative RPVI Granted by Specialty

Individually with current “active” certifications only; March, 2018
PVI By the Numbers: Overall

Volume Over Time: First-Timers v. Repeaters

Pass Rate Over Time: First-Timers v. Repeaters

2018 Data through March 15, 2018
In the fall of 2014, candidates were asked the reason for taking the exam as part of the post exam survey. Therefore, 2014 only includes information from the fall administration.

Candidates are counted as “For Boards” if they self-selected “Required for boards” as a reason they took the examination.
Domain Scores in 2017

Average Domain Score: First Timers v. Repeaters

Average Domain Score: Required for Boards v. Not Required for Boards
Point-of-Care Ultrasound
Point-of-Care Ultrasound Academy

APCA POCUS Fundamentals Certificate

Clinical Certificates
  – AAA
  – Abdominal Trauma
  – Cardiac
  – Gastrointestinal
  – Hepatobiliary/Spleen
  – Lower Extremity DVT
  – Lung
  – OB/1st Trimester
  – Renal Genitourinary

Specialty Certification
  – Emergency Medicine

Program launched 2017
POCUS Academy Score Card

• Total Enrollments since launch  1,145
• Total Test Takers since launch - unique individuals  597
• Total EM Certification Enrollments since launch  247
• Total Clinical Certificate Enrollments since launch  783
• Total Fundamentals Enrollments since launch  115
POCUS Academy Score Card

Total Issued
610

Total Clinical Certificates Issued
411
Preparation for the PVI Examination
Current PVI Eligibility Requirements

• Licensed MD or DO
  – or equivalent outside of US/Canada
• Clinical vascular ultrasound experience
  – Minimum of 500 cases
  – Interpreted over preceding 36 months
  – Up to 100 may be didactic or simulated
• Submit case log
Suggested Curriculum

• Didactic instruction and training in the interpretation of vascular laboratory studies

• Curriculum content **not** specified by APCA for ACGME-accredited programs (vascular surgery)

• For other post-graduate medical education programs not accredited by ACGME, RCPSC, or AOA (e.g. vascular medicine):
  – 30 hours of didactic instruction relevant to interpretation and other vascular laboratory topics
  – 40 hours of observation or supervised participation in a vascular laboratory setting
Documented Interpretation Experience

• Cases distributed over testing areas:
  – Carotid duplex ultrasound (extracranial cerebrovascular)
  – Transcranial Doppler (intracranial cerebrovascular)
  – Peripheral arterial physiologic testing (excludes ankle/brachial Index (ABI) and single level exams)
  – Peripheral arterial duplex ultrasound
  – Venous duplex ultrasound
  – Visceral vascular duplex ultrasound

• No more than 50% of the total coming from any one area
Case Logs

• **Submit** patient log or other record of interpretation experience
• Documentation must be maintained three years following the date of application approval
  – Case logs subject to audit
• Must include:
  – Date of case
  – Testing area
  – Whether the case was simulated/didactic or clinical
  – Name of supervising physician/medical director
  – Clinical site
Requirements for Didactic/Simulated Cases

• Equivalent to cases in a clinical diagnostic setting:
  – Indications and relevant clinical information presented
  – Complete technical information for examination provided, including images, cine loops, worksheets, and sonographer notes
  – Interpreting physician completes final report in format that meets IAC Vascular Testing Standards and Guidelines and compliant with requirements for clinical documentation and billing
  – Feedback from educator or supervisor indicating that the interpretation met standards or what changes were required
  – Time to complete interpretation should not be less than what would be required in a clinical diagnostic setting

• Case details available for audit
Maintain the Certification

• Attestation of compliance with standards and policies
• CME – 30 APCA/ARDMS-accepted CME credit hours in vascular ultrasound (three year period)
  – Preliminary discussions between specialty societies regarding development of an education and self-assessment program to meet this requirement
• Annual renewal fee: $100
APCA Volunteer Opportunities

• Write test items
• Review items
• Help set passing standard (passing score)
• Roles in governance positions

www.apca.org/volunteer

https://www.dropbox.com/s/p4nt7qh0vni6mpf/20161212_Inteleos_Volunteer_RC4_updated-v2.mp4?dl=0
Summary

• Programs may benefit from access to curriculum materials
  – Interprofessional education in the vascular laboratory

• PVI examination requires preparation
  – Understanding principles
  – Integration of fundamental knowledge
  – Experience with interpretation

• Point-of-Care Ultrasound (POCUS) seen as a major area of change as technology increasingly accessible

• Maintain interpretation case logs to meet application requirements