



Alliance for Physician Certification & Advancement

Point-of-Care Ultrasound (POCUS) Certification Guide

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Welcome to the Point-of-Care Ultrasound (POCUS) Certification Guide!

Thank you for your interest in our POCUS certificates and certifications! Using the table of contents below, click to navigate to the section of your choosing.

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POCUS Certifications Can Be Taken 24/7 Year-Round -- Apply Today!

Welcome to the Point-of-Care Ultrasound (POCUS) Program – the Clinical Certificate and Specialty Certification program in point-of-care ultrasound, designed to demonstrate your clinical proficiency, pride in your profession and your ongoing commitment to patient care and safety.

Through the Point-of-Care Ultrasound (POCUS) Academy you can obtain the following:: POCUS Fundamentals Certificates | Individual Clinical Certificates | Specialty Certifications

Steps To Taking Your POCUS Program Examinations:

1. Select the Best Option for You

Familiarize yourself with our POCUS Certificate(s) and Certification. Make sure to review the prerequisites for the certificate or certification you would like to earn.

2. Complete the Online Application

To apply you will need to receive your APCA ID Number (sign up or log into your existing MY APCA account) and complete the short online application. You will select the certificates and/or certification you wish to earn and attest that you meet the experience prerequisites.

3. Earn the POCUS Fundamentals Certificate

The Two-Part POCUS Fundamentals Certificate assesses your foundational knowledge in ultrasound principles and instrumentation topics and is required before any other POCUS Academy recognition may be earned. All practicing physicians that are in good standing are eligible to earn the POCUS Fundamentals Certificate*.

*The POCUS Fundamentals Certificate requirement is waived for physicians who have passed the Sonography Principles & Instrumentation (SPI) examination within the last 5 (five) years or who hold specific credentials offered by APCA or APCA's companion council, ARDMS®.

4. Earn an Individual Clinical Certificate Or POCUS Specialty Certifications

Individual Clinical Certificates assess your proficiency in a specific clinical area of point-of-care ultrasound (POCUS). Certificates are earned by completing a two-part assessment process. To be eligible to earn a Clinical Certificate, you must first satisfy the POCUS Fundamentals requirement*, be a physician in good standing, actively practice in the clinical area, and have completed a defined number of POCUS cases (found here).

POCUS Specialty Certifications are awarded once the candidate has successfully passed the Clinical Case Assessments for each clinical area identified as appropriate for that certification and has completed a Peer Evaluation.

5. Uphold Your Certificates & Certifications

Your POCUS Fundamentals Certificate will be valid for three (3) years, or as long as you have a valid APCA POCUS Academy Clinical Certificate or Certification. Your Clinical Certificates and Specialty Certifications will be valid for five (5) years. At the end of the five (5) years, you will be asked to complete a simple renewal process. For additional information or assistance, **please email:** POCUS@APCA.org.

POCUS Fundamentals Certificate

POCUS Fundamentals Certificate - Two-Part Process:

The POCUS Fundamentals Certificate assesses your knowledge in ultrasound principles and instrumentation topics and is required* before any Clinical Certificates may be earned.

The assessment process to earn the POCUS Fundamentals Certificate consists of two parts. The assessment is completed online and must be completed within 30 days of application submission:

Part 1 – Online Learning Reviews & Knowledge Checks:

The first part consists of eight online learning review modules. The modules are designed to either refresh your familiarity in a particular content area or allow you to test-out of a content area through a knowledge check. All eight learning modules must be completed either by reviewing the information presented or completing the knowledge check.

Part 2 – Multiple-Choice Examination:

The second part is an online multiple choice examination consisting of 35 questions. You will receive a pass/fail result upon completion. If you pass the examination, you will receive a POCUS Fundamentals Certificate and may continue on to apply for Clinical Certificates or Specialty Certifications. If you fail the examination, you may reapply after 30 days.

POCUS Fundamentals Prerequisites:

There are no prerequisites for the APCA Point-of-Care Ultrasound Fundamentals certificate, although applicants will need to possess a MY APCA identification number (which requires that they be physicians in good standing) and complete application attestations.

Candidates are expected to be prepared for the Point-of-Care Ultrasound Fundamentals assessment through the completion of training or educational programs concerning foundational Point-of-Care Ultrasound knowledge. This education should help to ensure that candidates are appropriately prepared to take the summative Point-of-Care Ultrasound Fundamentals assessment.

The examination can be attempted a maximum of three times.

^{*}The POCUS Fundamentals Certificate requirement is waived for physicians who have passed the Sonography Principles & Instrumentation (SPI) examination within the last five years or who hold specific credentials offered by APCA or APCA's companion council, ARDMS®.

POCUS Individual Clinical Certificates

To be eligible to earn a Clinical Certificate in a specific area of point-of-care ultrasound (POCUS), you must first satisfy the POCUS Fundamentals requirement*, be a physician in good standing, actively practice in the clinical area and have completed a defined number of POCUS cases within the last two years (see the prerequisites section for more details). Please find a list of Clinical Certificates available below:

- Abdominal Aortic Aneurysm (AAA)¹
- Abdominal Trauma ^{1,2,3}
- Cardiac ¹
- Gastrointestinal
- Hepatobiliary/Spleen

- Lower Extremity Deep Vein Thrombosis (DVT)¹
- Luna ^{1, 2}
- Musculoskeletal (MSK) Soft Tissue
- Obstetrics/First Trimester
- Renal/Genitourinary
- 1. Includes components of the Rapid Ultrasound for Shock and Hypotension (RUSH) protocol.
- 2. Includes components of the Extended Focused Assessment with Sonography for Trauma (eFAST) protocol.
- 3. Includes components of the Focused Assessment with Sonography in Trauma (FAST) protocol.

POCUS Individual Clinical Certificate Assessment - Two-Part Process:

The Clinical Certificates are earned through a two-part process which **must be completed within 90 days** of application submission. If either component of this two-part process (Peer Evaluations and the Clinical Case Assessment) is not successfully completed within the time frame allotted, you will need to reapply.

Part 1 - Peer Evaluations:

During the application process, you will provide names and emails of two healthcare providers at minimum who are familiar with your abilities to perform point-of-care ultrasound (POCUS) in the content area. Your peers may receive an email asking them to complete a short confidential online questionnaire within 90 days attesting to your abilities in the POCUS content area. The POCUS Academy will send email(s) to remind your peers to complete the evaluation.

Part 2 - Clinical Case Assessment:

Part two of this process is an online examination featuring a series of simulated cases in the selected POCUS content area with questions at key points in the virtual clinical encounter. The examination consists of 4 - 10 clinical cases and features interactive questions. If you fail the examination, you may reapply after 30 days. The examination can be attempted a maximum of two times before a one-year waiting period will be imposed. To help you prepare, and to see an example of the Clinical Case Assessment, click here to view the tutorial video.

The Clinical Certificates are awarded electronically within 30 days after the process is completed.

^{*}The POCUS Fundamentals Certificate requirement is waived for physicians who have passed the Sonography Principles & Instrumentation (SPI) examination within the last five years or who hold specific credentials offered by APCA or APCA's companion council, ARDMS®.

POCUS Specialty Certifications

The POCUS Academy is pleased to offer Specialty Certifications! These Specialty Certifications are awarded once the candidate has successfully passed the Clinical Case Assessments for each clinical area identified as appropriate for that certification and has completed a Peer Evaluation.

You have 180 days to complete all of the Clinical Case Assessments and the Peer Evaluation.

Currently, the POCUS Academy is offering the following specialty certifications:

• Emergency Medicine POCUS Certification:

This certification can be earned by completing the assessments and earning the point-of-care ultrasound clinical certifications for:

- Abdominal Aortic Aneurysm (AAA)
- Abdominal Trauma, Cardiac
- Hepatobiliary/Spleen
- Lower Extremity Deep Vein Thrombosis (DVT)
- Lung
- Obstetrics/First Trimester

The POCUS Academy is in the process of developing additional Specialty Certifications.

Upholding POCUS Certificates and Certifications

- 1. POCUS Fundamentals Certificate will be valid for (3) years or as long as you have a valid APCA POCUS Academy Clinical Certificate of Certification.
- 2. Your Clinical Certificates and Specialty Certifications will be valid for five (5) years. At the end of the five (5) years, you will be asked to complete a simple renewal process.

For additional information or assistance, please email: POCUS@apca.org.

POCUS Individual Clinical Certificates & Specialty Certification Prerequisites

In order to be eligible to take content-specific assessments, candidates must:

- Possess an active APCA Point-of-Care Ultrasound Fundamentals Certificate or have successfully completed the SPI Examination within the last five years **OR** hold a current APCA/ARDMS credential.
- 2. Be actively scanning patients with pathology in the designated content area(s) and attest to performing and participating in the interpretation of specified number of content-specific cases within the last two years.
- 3. Be an actively practicing physician in good standing.

Certificates & Certifications

Individual Clinical Certificates:

- Abdominal Aortic Aneurysm (AAA)
- Abdominal Trauma
- Cardiac
- Gastrointestinal
- Hepatobiliary/Spleen
- Lower Extremity Deep Vein Thrombosis (DVT)
- Lung
- Musculoskeletal (MSK) Soft Tissue
- Obstetrics/First Trimester
- Renal/Genitourinary

Prerequisites

- Current APCA POCUS Fundamentals Certificate or recognized equivalent*;
- 2. Be a physician in good standing;
- 3. Actively practicing in the clinical area(s); and
- 4. Must have performed and participated in the interpretation of the specified number of content-specific Point-of-Care Ultrasound cases within the last 2 years:
- 30 Cases:
 - Cardiac
- 25 Cases:
 - Gastrointestinal
 - Hepatobiliary/Spleen
 - Obstetrics/First Trimester (a combination of transvaginal and transabdominal)
- 20 Cases:
 - Abdominal Trauma
 - Lower Extremity Deep Vein Thrombosis (DVT)
 - Luno
 - Musculoskeletal (MSK) Soft Tissue
 - Renal Genitourinary
- 15 Cases:
 - Abdominal Aortic Aneurysm (AAA)

Specialty Certifications:

Emergency Medical POCUS Certification

As specified above for the requirements for AAA, Abdominal Trauma, Cardiac, Hepatobiliary/Spleen, Lower Extremity Deep Vein Thrombosis, Lung, and Obstetrics/First Trimester Clinical Certificates.

^{*}The POCUS Fundamentals Certificate requirement is waived for physicians who have passed the Sonography Principles & Instrumentation (SPI) examination within the last five years or who hold specific credentials offered by APCA or APCA's companion council, ARDMS®.

Applying & Taking Examinations

Applying for the Certificate(s) or Certification:

POCUS Academy examinations are administered online and may be taken from your own computer or tablet at your convenience.

To apply, please follow these steps:

- 1. Log in to MY APCA to set up your account and to receive your APCA ID number
- 2. Complete the short online application. You will select the certificates and/or certification you wish to earn and attest that you meet the experience prerequisites.

Taking the Examinations:

After the application, you may start your assessments immediately.

Examination Fees:

| | Certificates & Certifications | |
|--|----------------------------------|---------------------------------|
| POCUS Fundamentals | Individual Clinical Certificates | Emergency Medical Certification |
| \$125 Standard Fee* *Waived for physicians who currently hold APCA or ARDMS certifications. | \$150 Standard Fee | \$625 Standard Fee |

Technical Specifications:

| Technical Specifications | | |
|--------------------------|--|--|
| Operating System | Windows 10 Windows 8.1 (32-bit and 64-bit) Windows 7 SP1 (32-bit and 64-bit) Mac OSX 10.10 or newer | |
| Display | Minimum Resolution: 1024 x 768 in 16-bit color | |
| Network Connection | APCA suggests that, whenever possible, exams are completed using a wired network. Wired networks typically provide more reliable exam delivery performance than wireless networks. | |
| Internet Connection | Broadband (DSL, cable or LAN/WAN): 512 kbps up/down | |
| Internet Browsers | Internet Explorer 9+ (preferred), latest versions of Microsoft Edge, Chrome, Firefox, or Safari | |
| Browser Settings | Internet Cookies must be enabled. All Pop-Up blockers must be disabled. | |
| Sound | Headphones (or speakers if in a private location) are acceptable. Note: Closed Captioning is also provided. | |
| Testing Environment | A quiet test taking environment is recommended. Exams include audio and video components. Appropriate lighting and minimal distractions will improve the experience. | |

Preparing for Your Assessments

Before applying, you are expected to be prepared through the completion of training or educational programs concerning foundational and specific Point-of-Care Ultrasound. Following currently accepted practices for certifying bodies, APCA is not involved in education to assist candidate preparation. Many professional societies and educators offer quality POCUS training.

Candidates should carefully read all information concerning the APCA POCUS Academy and its' offerings prior to applying. You should also watch the tutorial video, read the examination information and review the Technical Specifications in the Apply tab section.

POCUS Academy Policies:

To read the APCA POCUS Academy Policies, please click here.

POCUS Fundamentals Certificate Format / Content Outline:

The Point-of-Care Ultrasound (POCUS) Fundamentals Assessment consists of eight modules and a multiple-choice assessment. Each module includes an Interactive Review and a Knowledge Check. The modules are in the following topic areas:

- Principles of Ultrasound Physics
- Echogenicity and Attenuation
- Machine Modes
- Instrumentation
- Transducers
- Image Orientation
- Ultrasound Artifacts
- Safety and Bioeffects

The assessment contains 35 questions in multiple-choice format. Some incorporate images or graphics. The percentages below show an approximate distribution of the questions across the content areas.

- Basic Principles of Ultrasound 27%
- Instrumentation 37%
- Ultrasound Artifacts 22%
- Safety and Bioeffects 14%

The POCUS Fundamentals Assessment content outline can be found below:

Basic Principles of Ultrasound:

- Understand the basic principles & terminology of US physics
- Describe the variables that affect the echogenicity of tissue & structures
- Describe the variables that affect ultrasonic signal attenuation

PREPARE FOR EXAMINATIONS

- Describe the variables that affect ultrasonic signal reflection
- Understand the effect of different media on sound propagation
- Describe the fundamental differences between Doppler US & B-mode US

Instrumentation:

- Describe the appropriate use of gain settings
- Understand the factors that determine transducer selection
- Describe the appropriate use of depth settings
- Describe the conventional image orientations

Safety & Bioeffects:

- Describe precautions used to prevent cross-contamination
- Describe the potential bioeffects of US

Ultrasound Artifacts:

Recognize & understand the cause of common US artifacts

Please note that candidates are expected to be prepared for the Point-of-Care Ultrasound Fundamentals assessment through the completion of training or educational programs concerning foundational Point-of-Care Ultrasound knowledge.

Peer Evaluation Outline / Format:

When applying for Clinical Certificates or Specialty Certifications, you will be asked to provide the names and email addresses of healthcare providers for each content area. These healthcare providers must have a clinical background in ultrasound and be familiar with your ability to obtain clinically-relevant content-specific point-of-care ultrasound images. When selecting your Peer Evaluators, you should pick healthcare providers who are very familiar with your use of point-of-care ultrasound in the content area(s) of interest.

APCA will contact these individuals to ask them to complete a short questionnaire regarding their impressions of your point-of-care ultrasound abilities for the chosen clinical area(s). Peer Evaluators will need to complete the questionnaire within 90 (ninety) days of your application. The first two Peer Evaluation questionnaires completed will determine if the Peer Evaluation assessment is Passed or Failed.

Before providing any contact information for selected Peer Evaluators to APCA, you should ask for their consent and make sure these individuals know that they may be contacted by the POCUS Academy. You should also let them know that their responses to the questionnaire will not be shared with you, but that both you and they will receive regular reminders until the questionnaire is completed and that it must be completed within 90 (ninety) days.

Peer Evaluators may be asked about the following, as appropriate for the selected clinical area(s):

- Your ability to obtain images of diagnostic quality
- Your use and/or understanding of gain
- Your use and/or understanding of depth
- Your transducer placement
- Your use and/or understanding of measurement techniques
- Your use of appropriate compression
- Your use and/or understanding of M-Mode, Color Doppler and/or Power Doppler
- Your overall experience with the chosen clinical area

Peer Evaluators will be reminded every fifteen (15) days. If one of your Peer Evaluators fails to complete the questionnaire, you are urged to contact a Peer Evaluator to encourage a response or to find a replacement who can respond in a timely manner.

Critical Case Assessment Outline / Format:

The Clinical Case Assessments were developed using a standard template that has been customized for each content area. Clinical scenarios are presented to candidates in audio and/or video formats (with closed-captioning and written scripts). Ultrasound media and assessment questions are presented at key points during the patient encounter. Questions are designed to assess the following (as appropriate for the selected clinical area):

- Familiarity with normal exploration paths
- Recognition of when patient condition or presentation requires deviations from the normal exploration paths
- Identification of regions or basic POCUS views described in consensus documents or protocols
- Ability to recognize and identify various anatomical features in M-mode and 2D images
- Knowledge of common sonographic artifacts or measurements
- Ability to identify artifacts that may aid in diagnosis
- Recognition of sonographic patterns and their implications for diagnosis
- Knowledge of common pathologies and conditions identified through POCUS
- Ability to comprehensively consider all case information (POCUS images, patient presentation, labs, etc.) to determine an initial diagnosis

- 1. Candidates applying for a Clinical Certificate will have 90 days to complete this assessment.
- 2. Candidates applying for a Specialty Certification will have 180 days to complete all required Clinical Case Assessments for their specific Specialty Certification.

To help you prepare for the Clinical Case Assessments, and to see examples of the question types, click here to view the tutorial video.

You will receive an email reminding you to complete all assessment components (Clinical Case Assessments and the Peer Evaluation) when there are 45 days remaining to the deadline.

Additional reminders will be sent when you have 30 days remaining and 7 days remaining to complete your assessment requirement.

For additional information or assistance, please email: POCUS@apca.org.