POCUS Certification Academy Handbook



Welcome to the POCUS Certification Academy Handbook

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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FOREWORD

Dear Colleagues of the Point-of-Care Ultrasound Community,

Welcome to the Point-of-Care Ultrasound Certification Academy. We offer a premiere selection of rigorous certifications, designed to validate the knowledge and skills of the most proficient users of point-of-care ultrasound (POCUS). At the POCUS Academy, we are proud to be backed by over 45 years of elite credentialing experience through the Inteleos community, which includes other certifying bodies such as the American Registry for Diagnostic Medical Sonography (ARDMS) and the Alliance for Physician's Certification and Advancement (APCA). Together, we are committed to driving the Inteleos' mission of delivering rigorous assessments and cultivating a global community of professionals dedicated to the highest standards of healthcare.

Point-of-care ultrasound has been appropriately named "the stethoscope of the future". Through advancements in technology like 3-D printing and artificial intelligence, POCUS has become a cutting-edge imaging modality that is more accessible, affordable, and adaptable to healthcare providers in every practice setting. Handheld ultrasound has truly been deployed on the frontlines, from conflict zones to emergency rooms filled with COVID-19 patients. Similarly, POCUS is also being used by pediatricians in family medicine, by anesthetists for procedural guidance, by physical therapists for musculoskeletal scanning, and by so many others. Soon, we can expect point-of-care ultrasound devices in every clinic, hospital, provider office, and healthcare program around the world.

Through our global partnerships, we continue to see the importance of POCUS in all medical settings. Utilizing this powerful tool, clinicians are able to make timely decisions which enhance the clinician's practice and improves patient care. The POCUS Academy is dedicated to further improving patient care through psychometrically validated certifications. By aligning clinical practice to globally recognized standards, we expect improvement in patient care and enhanced provider decision making; therefore, improving health outcomes around the world. This commitment to excellence is upheld by our volunteer subject matter experts who write and review our exams, provide educational resources through our Learning Library, present at the annual POCUS World Conference, and engage their communities through POCUS-based projects.

We are the leading POCUS certifying body and we will continue to evolve with the needs of patients and providers. With certificants in over 100 countries, we are devoted to creating a global community focused on the advancement of POCUS through accessible and affordable education and certification. This is supported by our strides in remote credentialing, which has allowed clinicians from diverse settings and specialties to get certified where they practice, while they practice.

On behalf of the POCUS Certification Academy, I wish you good luck on your POCUS journey. We look forward to serving you through education, certification, and community opportunities.

Regards,

Steffen Sammet, M.D., Ph.D., DABR, DABMRS, FAMP

POCUS Certification Academy Council Chair

Why POCUS is the Diagnostic Tool for Leading Edge Healthcare Professionals?

- Proven Technology From physicians to emergency care workers to global health experts, practitioners around the world leverage proven ultrasound technology to provide effective diagnostic care.
- Patient Centered POCUS devices, in the hands of certified professionals, build patient understanding and trust through real-time feedback.
- Cost Effective Streamline diagnostic processes and reduce unnecessary procedures through effective use of POCUS in clinic, hospital, and frontline care settings.

How the POCUS Certification Academy Advances Standards in POCUS?

- The POCUS Certification Academy was founded by Inteleos® which includes the Alliance for Physician Certification and Advancement™ (APCA™) and the American Registry for Diagnostic Medical Sonography® (ARDMS®), the standard bearer in ultrasound credentials for more than 40 years.
- With the expert guidance of the POCUS Certification Academy Council Members, standards of excellence in POCUS use were established, and innovative certification and certificate solutions have been developed to meet the needs of global healthcare professionals.
- The POCUS Certification Academy supports these credentials with a growing body of educational resources and a community of professionals passionate in the use of POCUS.

Why POCUS Credentials Advance Effective Patient Care?

- The POCUS Certification Academy Council members consist of 9 subject matter experts committed to advancing the effective use of POCUS globally.
- The POCUS Fundamentals Certificate addresses eight important content domains for understanding the operation and applications of POCUS and serves as both an educational review course and assessment.
- POCUS individual certifications and specialty certifications take the learning further through in-depth application and assessment of POCUS use.



The Point of Care Ultrasound (POCUS) Certification Academy is the leading global POCUS certification body with certificants in over 100 countries. We are devoted to providing healthcare professionals with the education and certification resources needed to optimize POCUS practice and create a global community focused on the advancement of POCUS."

Steffen Sammet, M.D., Ph.D., DABR, DABMRS, FAMP

POCUS Certification Academy Council Chair

POCUS PROGRAM OVERVIEW

Welcome to the Point-of-Care Ultrasound (POCUS) Program – the Clinical Certificate and Specialty Certification program in POCUS, designed to demonstrate your clinical proficiency, pride in your profession and your ongoing commitment to patient care and safety. Through the POCUS Certification Academy you can obtain the following:

- POCUS Fundamentals Certificate
- Individual Clinical Certifications
- Specialty Certifications

STEPS TO TAKING POCUS EXAMINATIONS

Select the Familiariz

Select the Best Option for You

Familiarize yourself with our POCUS Certificates and Certifications, including the prerequisites for any advanced certificate or certification you would like to earn.

2

Complete the Online Application

To apply you will need to receive your POCUS ID Number (<u>sign up</u> or log into your existing <u>myPOCUS</u> account) and complete the short online registration. You will select the certificates and/or certifications 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 clinicians that are in good standing are eligible to earn the POCUS Fundamentals Certificate.* Recommended to have prior healthcare training.

4

Earn an Individual Clinical Certification Or Specialty Certification

Individual Clinical Certifications assess your proficiency in a specific clinical area of POCUS. Clinical Certifications are earned by completing a two-part assessment process: the Clinical Case Assessments and Peer Evaluations. To be eligible to earn a Clinical Certification, you must first satisfy the POCUS Fundamentals requirement*, be a healthcare professional in good standing, actively practice in the clinical area, and have completed a defined number of POCUS cases. POCUS Specialty Certifications are awarded once the candidate has completed a three-part assessment process. Candidates must successfully pass the Clinical Case Assessments for each clinical area identified as appropriate for that certification, completed the Peer Evaluations and the Video Submissions.



Maintain Your Certification

Your POCUS Fundamentals Certificate will not expire nor require renewal. Specialty Certifications and Clinical 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@Inteleos.org.

^{*}The POCUS Fundamentals Certificate requirement is waived for applicants who have passed the <u>Sonography Principles & Instrumentation (SPI)</u> examination within the last 5 (five) years or who hold specific credentials offered by <u>Inteleos'</u> companion councils, <u>ARDMS®</u> and <u>APCA™</u>.

CERTIFICATES AND CERTIFICATIONS

POCUS FUNDAMENTALS CERTIFICATE

The POCUS Fundamentals Certificate assesses your knowledge in ultrasound principles and instrumentation topics and is required* before any Clinical Certifications or Specialty Certifications 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 purchase:



Part 1 — Online Learning Reviews & Knowledge Checks

Familiarize yourself with our POCUS Certificates and Certifications, including the prerequisites for any advanced certificate or certification you would like to earn.

You will have unlimited access to the learning modules until the summative assessment is started. Please note, there is only one attempt to complete the summative assessment.



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 Certifications or Specialty Certifications. If you fail the examination, you may reapply after 30 days.



The examination can be attempted a maximum of three times.

Certificate Prerequisites

There are no prerequisites, though it is recommended to have prior healthcare training, for the POCUS Fundamentals certificate. Applicants need to possess an identification number (which requires that they be healthcare professionals 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.

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POCUS INDIVIDUAL CLINICAL CERTIFICATIONS

To be eligible to earn a Clinical Certification in a specific area of point-of-care ultrasound (POCUS), you must first satisfy the POCUS Fundamentals requirement*, be a healthcare professional 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 Certifications available below:

- Abdominal Aortic Aneurysm (AAA)¹
- Abdominal Trauma^{1,2,3}
- Cardiac
- Gastrointestinal
- Hepatobiliary/Spleen
- Inferior Vena Cava (IVC)
- Lower Extremity Deep Vein Thrombosis (DVT)¹

- Lung^{1,2}
- Musculoskeletal (MSK) Lower Extremity
- Musculoskeletal (MSK) Soft Tissue
- Musculoskeletal (MSK) Upper Extremity
- Obstetrics First Trimester
- Obstetrics Second/Third Trimester
- Renal/Genitourinary

The Clinical Certifications are earned through a two-part process which must be completed within 90 days of purchase. 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 and purchase.



Part 1 - Clinical Case Assessment

The clinical case assessment 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 to 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, visit our How to Prepare page.



Part 2 — 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 will 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 Certification Academy will send email(s) to remind your peers to complete the evaluation. Click here to review the peer evaluation outline.



The Clinical Certifications are awarded electronically within 30 days of completing the process.

¹Includes components of the Rapid Ultrasound for Shock and Hypotension (RUSH) protocol.

 $^{{\}it ^2} Includes\ components\ of\ the\ Extended\ Focused\ Assessment\ with\ Sonography\ for\ Trauma\ (eFAST)\ protocol.$

³Includes components of the Focused Assessment with Sonography in Trauma (FAST) protocol.

^{*}The POCUS Fundamentals Certificate requirement is waived for applicants who have passed the <u>Sonography Principles & Instrumentation (SPI)</u>
<u>examination</u> within the last 5 (five) years or who hold specific credentials offered by <u>Inteleos'</u> companion councils, <u>ARDMS</u>[®] and <u>APCA</u> $^{\text{m}}$.

POCUS SPECIALTY CERTIFICATIONS

The 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 the Peer Evaluation and Video Submissions. <u>You can review details about the video submission component here.</u>

The Specialty Certifications are earned through a three-part process which must be completed within 180 days of purchase. These certifications can be earned by completing the assessments and earning the point-of-care ultrasound clinical certifications defined below:

POCUS Emergency Medicine Certification

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

Global POCUS Principles Certification

- Abdominal Trauma
- Cardiac
- Luna
- Musculoskeletal (MSK) Soft Tissue

POCUS Musculoskeletal Certification

- Musculoskeletal (MSK) Lower Extremity
- Musculoskeletal (MSK) Soft Tissue
- Musculoskeletal (MSK) Upper Extremity

POCUS Maternal Fetal Health

- Obstetrics First Trimester
- Obstetrics Second/Third Trimester

POCUS Generalist Certification

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

POCUS Critical Care Certification

- Abdominal Aortic Aneurysm (AAA)
- Abdominal Trauma
- Cardiac
- Hepatobiliary/Spleen
- Inferior Vena Cava (IVC)
- Lower Extremity Deep Vein Thrombosis (DVT)
- Lung

POCUS Nephrology Certification

- Cardiac
- Inferior Vena Cava (IVC)
- Lower Extremity Deep Vein Thrombosis (DVT)
- Luna
- Renal/Genitourinary

MAINTAINING POCUS CLINICAL CERTIFICATES AND SPECIALTY CERTIFICATIONS



Your Clinical Certifications and Specialty Certifications will be valid for five (5) years. At the end of five (5) years, you will be asked to complete a simple renewal process.

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

POCUS INDIVIDUAL CLINICAL CERTIFICATIONS & SPECIALTY CERTIFICATION PREREQUISITES

ELIGIBILITY

Possess an active POCUS Academy 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.

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.

PREREQUISITES

- Current POCUS Academy POCUS Fundamentals Certificate or recognized equivalent*;
- Be a healthcare professional in good standing;
- 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; Inferior Vena Cava (IVC); Obstetrics First Trimester*; Obstetrics Second/Third Trimester *a combination of transvaginal and transabdominal
20 CASES	Abdominal Trauma; Lower Extremity DVT; Lung; MSK Lower Extremity; MSK Soft Tissue; MSK Upper Extremity; Renal/Genitourinary
15 CASES	Abdominal Aortic Aneursym (AAA)

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<u>examination</u> within the last 5 (five) years or who hold specific credentials offered by <u>Inteleos'</u> companion councils, <u>ARDMS</u>[®] and <u>APCA</u>^{\mathbb{M}}.

APPLYING AND COMPLETING EXAMINATIONS

Preparing for Your POCUS Assessments

The POCUS Certification Academy is not involved in education to assist candidate preparation. Many professional societies and educators offer quality point-of-care ultrasound training. To address this need, we have established the POCUS Education Providers Program which connects POCUS users with educators. More information is available here.

Candidates should carefully read all information concerning the POCUS Certification Academy and its offerings prior to applying. In addition, the POCUS Academy recommends reviewing the examination information including the content outlines available on the certificate's or certification's informational page, and the How to Prepare page. You may also access content outlines for each clinical certificate below.

Applying for the Certificates and Certifications

POCUS Certification 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 myPOCUS.If you don't have a POCUS number, click here to create one.
- 2 Confirm that your device meets our technical specifications available below.
- Select the certificate(s) and/or certification(s) you wish to earn and attest that you meet the experience prerequisites.
- 4 Complete the payment process.

Examination Fees

USD 125	POCUS Fundamentals
USD 150	POCUS Individual Clinical Certifications
USD 350-625	POCUS Specialty Certifications – Refer to this <u>link</u> for the most updated pricing.

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<u>examination</u> within the last 5 (five) years or who hold specific credentials offered by <u>Inteleos'</u> companion councils, <u>ARDMS</u>[®] and <u>APCA</u>^{\mathbb{M}}.

Completing Your Examinations

After the application, you may start your assessments immediately. Certificate and certification components can be found above or on the respective informational pages available here.

You will receive an email reminding you to complete all assessment components related to your certificate or certification when there are 45 days remaining to the deadline. Additional reminders will be sent when you have thirty (30) days remaining and seven (7) days remaining to complete your assessment requirement.

Technical Specifications

Operating System	 Windows 10 or newer 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	We suggest 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	 Chrome (recommended) Firefox Microsoft Edge Safari
Browser Settings	 Internet Cookies must be enabled. All Pop-Up blockers must be disabled. Make the following sites trusted sites: Ims12.learnshare.com
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.

ADDITIONAL INFORMATION

POCUS Certification Academy Policies

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

POCUS Fundamentals Certificate Outline/Format

The POCUS Fundamentals online learning reviews, knowledge checks, and multiple-choice examination were developed using a standard template that has been customized for foundational POCUS concepts. Information is presented to candidates in audio and/or video formats (with closed-captioning and written scripts). During the assessment phase, the candidate will be expected to do the following:

- Explain the principles of ultrasound physics
- · Define echogenicity and attenuation
- List and explain the ultrasound machine settings and modes
- · Identify the different transducer types
- Explain ultrasound image orientation
- · Describe ultrasound safety principles, ultrasound artifacts, and ultrasound bioeffects

Individual Clinical and Specialty 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.

Peer Evaluation Outline/Format

When applying for Clinical Certifications 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 contentspecific point-of-care ultrasound images. When selecting your peer evaluators, you should pick healthcare providers who are very familiar with ultrasound training in the content area(s) that interest you.

The POCUS Certification Academy 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 days and 180 days (for specialty certifications) of your purchase. 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 the POCUS Certification Academy, you should ask for their consent and make sure these individuals know that they will be contacted by the POCUS Certification 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 days and 180 days (for specialty certifications).

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.

Specialty Case Video Submission Outline/Format

The video submission is designed to assess your practical abilities in POCUS. For certifications, you will submit two videos per clinical area: one without pathology, and one with identified pathology. Some clinical areas will require a still image to demonstrate measurement.

All videos must meet the following requirements:

- · HIPAA compliant
- .mp4 formatted
- 5 60 seconds long

All submissions will be evaluated by clinical reviewers based on POCUS-specific criteria. Submissions must be received and evaluated within the 180 days. Each submission will be evaluated with a pass or comments for re-submission.