Ultrasound Training Designed for Physician Assistants

Point-of-care ultrasound performed by trained practitioners has been documented to improve patient outcomes and experiences.

- **Provide faster diagnoses of critical conditions**[^1][^2]  
  E.g., Leaking AAA and ruptured ectopic pregnancy
- **Decrease procedural complications**[^3]  
  E.g., Pneumothorax following thoracentesis
- **Reduce delays in care**[^4]  
  E.g., Faster IV antibiotic administration in difficult access patients

84% of PAs indicated that their clinical rotation ultrasound training was **insufficient** to prepare them for clinical practice.^[5]

**With SonoSim’s blended learning approach, PAs are better prepared for clinical settings.**

Blended learning allows students to do the majority of didactic learning and initial scanning practice outside the classroom. **This self-directed learning will improve PA student and practitioner diagnostic and management capabilities and will lead to improved patient care.**

**On-the-Job Benefits:**
- Develop comprehensive ultrasound knowledge and proficiency
- Assist in ultrasound-guided procedures and surgeries
- Meet training program and/or job-specific ultrasound proficiency requirements

Research Shows that SonoSim is...

- **Equally effective** as live instruction in ultrasound image acquisition training[^6]
- **More effective** than live instruction in ultrasound image interpretation training[^7]
- Able to **uniformly train & assess** any number of learners[^8]
SonoSim facilitates the delivery of standardized ultrasound training tailored to meet distinct learning needs from fundamental to advanced topics covering a broad spectrum of pathologic conditions and ultrasound skills.

**Cardiac**
- Pericardial Effusion
- Left Ventricular Systolic Dysfunction (Mild-to-Severely Diminished Function)
- Right Heart Strain
- Right Atrial Pressure Assessment
- Cardiac Chamber Enlargement
- Pulmonary Hypertension
- Valvular Dysfunction
- Cardiac Doppler Applications

**Relevant Modules**
- Fundamentals of Ultrasound
- Heart
- Cardiology: Core Clinical
- FoCUS: Part I & II

**Pulmonary**
- Pleural Effusion
- Pneumothorax
- Alveolar-Interstitial Syndrome
- Pneumonia
- Lung Consolidation
- Pulmonary Edema
- Pulmonary Embolism
- Thickened Plural Lining
- Pathologic B-Lines

**Relevant Modules**
- Fundamentals of Ultrasound
- Lungs
- Pulmonary: Core Clinical

**Genitourinary & Small Parts**
- Mild & Moderate Hydronephrosis
- Renal Stones & Cysts
- Bladder & Prostate Assessment

**Relevant Modules**
- Fundamentals of Ultrasound
- Adrenal Glands
- Bladder
- Prostate
- Renal
- Scrotum
- Thyroid
- Bladder: Core Clinical
- Renal: Core Clinical
- Ocular: Core Clinical

**Vascular**
- Abdominal Aortic Aneurysm
- Deep Vein Thrombosis
- IVC & Volume Assessment

**Relevant Modules**
- Fundamentals of Ultrasound
- Aorta/IVC
- Arm-Arterial
- Arm-Venous
- Cerebrovascular
- Leg-Arterial
- Leg-Venous
- Aorta/IVC: Core Clinical
- DVT: Core Clinical
- RUSH: Core Clinical

**Abdominal**
- Peritoneal Free Fluid Evaluation
- Cholelithiasis
- Acute Cholecystitis
- Chronic Liver Disease
- Appendicitis
- Splenomegaly

**Relevant Modules**
- Fundamentals of Ultrasound
- Aorta/IVC
- Biliary Tree
- GI Tract
- Liver
- Pancreas
- Spleen
- Aorta/IVC: Core Clinical
- eFAST Protocol: Core Clinical
- FAST Protocol: Core Clinical
- Intestinal/Biliary: Core Clinical

**OB/GYN**
- Transvaginal Scanning
- Gestational Age Measurements
- Placenta & Amniotic Fluid Evaluation
- Determine Fetal Presentation
- Simple & Complex Adnexal Cysts
- Abnormal Uterine Bleeding

**Relevant Modules**
- Fundamentals of Ultrasound
- Female Pelvis
- OB/GYN: Core Clinical
- First-Trimester Pregnancy
- Second- & Third-Trimester Pregnancy: Part I & II
- GYN Normal Uterus
- GYN Abnormal Uterus: Part I & II
- GYN Normal Adnexa
- GYN Nonmalignant & Malignant Adnexal Conditions

**MSK**
- Abscess v. Cellulitis
- Joint Effusions
- Tendinopathy
- Fractures

**Relevant Modules**
- Introduction to MSK
- Ankle
- Elbow
- Foot
- Hand & Finger
- Hip
- Knee
- Shoulder
- Soft Tissue
- Spine
- Wrist
- Musculoskeletal: Core Clinical
- Soft Tissue: Core Clinical

**Procedures**
- Place Internal Jugular Lines
- Place Subclavian Lines
- Place Femoral Lines
- Place Peripheral Venous Lines

**Relevant Modules**
- Introduction to Ultrasound-Guided Procedures
- Ultrasound-Guided Femoral Line Placement
- Ultrasound-Guided Internal Jugular Vein Cannulation
- Ultrasound-Guided Subclavian Vein Cannulation
- Peripheral Venous Access