Enhance the ultrasound learning process in obstetrics and gynecology

CAE Vimedix OB-GYN is an effective tool for learning transabdominal and transvaginal ultrasound. Our manikin-based simulator allows healthcare professionals to quickly acquire the psychomotor and cognitive skills needed to achieve proficiency in ultrasound scanning.

With more than 50 pathologies and self-directed instructional content, Vimedix OB-GYN provides trainees with exposure to, and practice in, realistic obstetrical and gynecological cases they might not normally see—all without risk to patients.

Now available as a software update, the CAE Vimedix 3.2 platform provides 3D/4D scanning and multiplanar reconstruction (MPR) views within obstetrics and gynecology to rule out fetal abnormalities throughout pregnancy—offering far more value than a standard OB-GYN ultrasound.

Differentiating Features
• Optional add-on modules (cardiac, lung, abdominal) that support multiple ultrasound applications on a single common platform
• Self-directed instructional content that makes ultrasound learning easily scalable
• Continuous development of new functionalities and content
• 3D/4D ultrasound with MPR for endovaginal and transvaginal scanning
• Remote learning capabilities to teach livestream and/or learn predetermined curricula
• Ability to customize content and curriculum with custom filters and presets
• Localization available to support various markets
• VimedixAR application for Microsoft HoloLens 2 allows enhanced learning via Augmented Reality (AR)

Learn more about CAE Vimedix 3.2 at caehealthcare.com/vimedix.
Technical Specifications

Standard Equipment
- Female multi-purpose manikin
- Phased array, ultrasonic curvilinear and/or transvaginal transducer(s)
- HP® Omen laptop with wireless mouse
- Cables (power, DVI, ethernet)
- User guide
- Option to add cardiac/abdominal capabilities to the simulator

Specifications, Dimensions
- Catherine female multi-purpose manikin
  - 38 X 18.5 in (96.5 cm X 47 cm)
  - 30 lbs (13.6 kg)

Computer
- 15.94 X 11.01 X 1.06 in (W X D X H)
  - 40.49 X 27.97 X 2.69 cm
- CPU: Intel® Core™ i9-9880H
- Hard drive: 1 TB SSD
- Memory: 16 GB
- Graphics card: NVIDIA® GeForce® RTX 2080 (8GB)
- OS: Microsoft® Windows® 10
- Screen: 17.3 in

External Polhemus Box
- 7 X 6 X 2 in
  - 17.78 X 15.24 X 5.08 cm
- 1.65 lbs (0.62 kg)

Electrical
- Operates at 110/240V 50/60Hz

Ambient Temperature Range
- 41°F – 95°F (5°C – 35°C)

Humidity
- 40 – 80%

Key Features
- Manikin-based system that replicates real-time visual, physical and ergonomic attributes of ultrasound scanning
  - Palpable thoracic and pelvic bony landmarks, combined with motion tracking system, allow 6 degrees of freedom to align physical manikin with virtual anatomy in Vimedix software
- Supports Transabdominal and Transvaginal ultrasound scanning on a single platform
- Simulation of obstetric and gynecologic images and functions
  - 2D/3D/4D, Biplane, M-mode views
  - MPR
  - Adjustable image settings (depth, viewing angle, gain, contrast)
  - Ability to complete measurements, including length/diameter, circumference and area
  - 20-week obstetric report function, with automated calculations and drop-down menus consistent with typical obstetric scanning protocols, and workflow
  - Zoom function for ultrasound images
  - Ability to freeze image and scroll through frames
  - Ability to add noise on ultrasound view to alter image quality and level of viewing difficulty
  - More than 50 available pathologies in the first and second trimesters of pregnancy, with the option to hide pathology names (Stealth Mode)
  - Gynecological pathologies available
- Interactive remote education tools using any web conference application
- 2D AR showing animated anatomy with labeled structures that can be moved and rotated to learn structure identification and spatial orientation
- Ability to enable/disable anatomical structures on 2D AR display, and bone, lung and abdominal artefacts on ultrasound display
- Ability to switch between split screen and single screen views of 2D AR display, and ultrasound display
- Self-directed instructional content modules that allow learners to practice in the absence of a live instructor:
  - Basic probe movements
  - Optimization of image settings
  - Obtaining views using Target Cut Planes (TCPs)
  - Echocardiographic measurements
- TCP exercises that provide reference guides and images to aid learners in identifying the correct probe positioning/orientation to obtain specific ultrasound views
- Quantifiable kinematic metrics that can be recorded during TCP exercises to assess and monitor user performance
- Ability to capture and export images, videos, reports and metrics
- Ability to connect the simulator to a second display, with the option to either extend or mirror the Vimedix interface
- Access to CAE Healthcare’s ICCU e-Learning curricula for critical care ultrasound and guided procedures

© 2021 CAE Healthcare 547-0421 Rev22