CAE

CAE Apollo

MEDGUARD
Professional Healthcare Supplies

Prehospital and Nursing Patient Simulator

Introduce learners to the full spectrum of healthcare scenarios with CAE Apollo. Available in two configurations—prehospital and nursing—this wireless and tetherless adult manikin accelerates learning, decreases time to proficiency and increases debriefing efficacy through automated and relevant patient responses.

Built with powerful features to enhance medical training, CAE Apollo uses proprietary modeled physiology to automatically trigger patient behaviors and actions, including:

- Blinking
- Reactive pupils
- Tongue swelling
- Bleeding and fluid drainage
- Bilateral pulses
- Uni- and bilateral chest expansion
- Lung, heart and abdominal sounds
- Abdominal distension with esophageal intubation

A self-contained unit with its own wireless router, CAE Apollo serves as the hub for integrated scenarios and can easily connect to CAE Maestro and CAE SimEquip without accessing the local network.

With high-fidelity features, this patient simulator provides learners with an immersive and authentic experience to prepare for the moments that matter.

CAE Apollo in use with CAE SimEquip

Adaptable patient care

CAE Apollo has been field-tested by thousands of customers worldwide and is recognized for its realism, relevance, versatility and reliability.

CAE Apollo Prehospital

Real Equipment
Realistic airway equipment, cardiac monitors and electrical therapy provide true-to-life experience.

Lifesaving Lessons
Realistic skin, facial movements and airway conditions prepare learners to assess and address respiratory complications.

Blood Bank
Bleeding from upper and lower extremities enhances trauma training and care.

CAE Apollo Nursing

Real Fluids
Perform gastric and airway suctioning using real fluids.

IV Access
Varying veins, valves and access points create realistic conditions to learn and practice proper IV sizing and placement.

Trach Training
Practice tracheostomy care, including suctioning the tube and removing secretions to ensure the patient airway remains open.

CAE Apollo

Technical Specifications

Manikin

74" H x 26" W x 11" D (188 cm x 66 cm x 28 cm)
100 lbs. (45.4 kg)

Electrical

AC Input: AC 90-240VAC, 50/60Hz
2 internal batteries: 18.5V, 233Wh lithium-ion, rechargeable

Available in two skin tones: Medium Dark

Available in two models: Prehospital and Nursing

Standard Equipment

- Microsoft Surface Tablet (Surface Pro and Surface Go)
- CAE Maestro physiologically driven operating software
- Four simulated clinical experiences (SCEs)
  - Anaphylaxis
  - Heart failure with pulmonary edema
  - Severe asthma
  - Subdural hematoma
- One CAE Maestro Standalone license including the modeled physiology option
- Ultrasound scan records: normal and pathologic cases including cardiac, abdominal, FAST and pleural surface scans
- Simulated patient monitor software
- Electronic user guide
- CAE Premier warranty plan with customer and technical support, Training for Life™ and option to renew

Optional Equipment

- Patient monitor computer
- Additional battery pack
- FX-simulated wound kit and limb injuries
- CAE SimEquip defibrillator/transport vent/ventilator/anesthesia
- Hands-free defibrillation cable kit
- Wall air kit
- Manikin tool kit

Optional Software

- Learning modules (more than 15 available)

Key Features & Benefits

Airway (assess and manage airway)

- Bag-valve-mask ventilation with chest rise/fall and software recognition
- Head tilt/chin lift
- Jaw thrust
- Tongue swelling
- Bronchial occluder
- Surgical cricothyrotomy
- Needle cricothyrotomy
- Laryngeal mask airways (LMA) and other supraglottic airway devices including King and I-Gel airway devices

Articulation

- Articulating neck, shoulders, elbows, arms, knees and hips

Cardiovascular (assess and manage perfusion status)

- Defibrillation and cardioversion using live defibrillators
- Pacing (use of hands-free pads)
- 12-lead dynamic ECG display
- Cardiac library of over 50 rhythms
- ECG monitoring posts and interface with real ECG monitor
- Bilateral blood pressure measurement by auscultation and palpation
- Bilateral carotid, brachial, radial, femoral, popliteal and dorsalis pedis pulses

CPR

- Compliant with 2020 AHA BLS guidelines and 2021 ERC guidelines measuring depth, rate and chest compression ratio
- Adequate chest compressions result in simulated circulation, cardiac output, central and peripheral blood pressures, carbon dioxide return
- Hand-placement detection

Gastric and Urinary (assess and manage gastrointestinal and genitourinary status; deliver and manage medications and fluids; perform catheter insertions)

- Nasogastric tube placement
- Bowel sounds, all four quadrants

Neurological (perform neurological assessments to identify abnormalities/deficiencies)

- Blinking and reactive pupils with multiple settings
- Convulsions

Respiratory (assess and manage breathing)

- Bilateral and unilateral chest rise and fall
- Spontaneous breathing
- Bronchial occlusion
- Integrated SpO2 finger probe with simulated patient monitor
- Bilateral chest tube insertion, sensored, with fluid output

Sounds

- Prerecorded sounds and speech, custom vocalization by the user via wireless microphone
- Heart, bowel and breath sounds (anterior and posterior) independently controlled
- Audible breathing sounds (wheezing and gasping)

Trauma

- Bleeding and fluid drainage linked to physiology
- Two simultaneous bleeding/moulage sites with 1.5 L blood tank capacity
- Limbs can be removed at the knees and elbows to support amputations
- Automatic responses to 68 intravenous medications, including oxygen, when using modeled physiology
- Responses are dose-dependent and follow appropriate time course

Urinary

- Urinary catheterization with fluids
- Interchangeable male and female genitalia

Vascular Access (manage intravenous and intraosseous access for medication delivery)

- Bilateral IV placement sites in antecubital fossa and dorsum of hand
- IM injection site
- Humeral IO site

Prehospital Configuration Additional Features

Airway

- Upper airway designed from CT scan data of a real human patient
- Intubation: orotracheal, nasotracheal, retrograde, fiber optic
- Right mainstem intubation detection
- Gastric distention with esophageal intubation
- Laryngospasm
- Airway occluder
- Posterior oropharynx occlusion

Breathing

- Carbon dioxide exhalation with CO_2 cartridge
- Bilateral needle decompression

Secretions

- Eyes, nose and mouth

Nursing Configuration Additional Features

Airway

- Airway reservoir supports suctioning of fluids via tracheostomy tube

Gastrointestinal

- Gastric reservoir supports simulated gastric lavage, gavage and gastric suction

IV

- Subclavian venous catheter