Cuyahoga Community College Center for Health Industry Solutions

HUMAN PATIENT SIMULATION PROGRAM



Apollo Patient Simulator



METIman Patient Simulator



Apollo Patient Simulator

Cuyahoga Community College Westshore Campus 31001 Clemens Road Westlake, Ohio 44145

METIman Patient Simulator

Cuyahoga Community College Manufacturing Technologies Center 2415 Woodland Ave. Cleveland, Ohio 44115 INFORMATION www.tri-c.edu/healthcare 216-987-2942



ABOUT THE HEALTH SIMULATION CENTERS

The Cuyahoga Community College (Tri-C[®]) Health Simulation Centers are centers for creative learning where the art and science of health care education meet. Located at the Westshore Campus and the Manufacturing Technologies Center at the Metropolitan Campus, the centers offer programming in numerous disciplines to promote the delivery of safe, advanced patient care.

The Health Simulation Centers promote workforce, economic and community development, serving as regional catalysts for global change through accessible academic and career-oriented education, lifelong learning and community partnerships.

Utilizing the latest technology and equipment, the centers address the training needs of employees in health care occupations including nursing, emergency medicine, occupational therapy, EMS and long-term care while promoting workforce education among Tri-C students.

Instruction and tours are available for high school and vocational school students from surrounding communities.

Services are also available through the Health Simulation Centers to assist any group in promoting health care education:

- Customizable Human Patient Simulator scenarios
- Train the Trainer
- New clinical staff orientation
- Standardized patient care pathways
- Computerized simulation case studies

VISIT THE HEALTH SIMULATION CENTERS

To schedule a tour or inquire about service fees, contact:

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METIman Patient Simulator

APOLLO PATIENT SIMULATOR A new standard for realism in patient simulation

ABOUT THE SIMULATOR

Apollo goes beyond the essentials to achieve an exceptional level of authenticity in patient simulation, providing a wide range of flexibility and versatility in running Simulated Clinical Experiences (SCEs) for training and assessment.

Key Features

Airway

- Bag-valve-mask ventilation
- Head tilt/chin lift
- Jaw thrust
- Tongue swelling
- Bronchial occlude
- Upper airway designed from CT scan data of a real human patient
- Surgical cricothyrotomy
- Needle cricothyrotomy
- Intubation: orotracheal, nasotracheal, ET tubes, LMA, retrograde, fiber optic, right mainstem
- Breakaway teeth
- Gastric distention with esophageal intubation
- Laryngospasm
- Airway occluder
- Posterior oropharynx occlusion
- Airway reservoir supports suctioning of fluids via tracheostomy tube

Breathing

- Bilateral and unilateral chest rise and fall
- Spontaneous breathing
- Integrated SpO2 finger probe with simulated patient monitor
- Breath sounds over entire lungs
- Bilateral chest tube insertion with fluid output
- Pulmonary artery catheter and ability to wedge the catheter, with display on the waveform display monitor or a physiologic monitor
- Measures the presence or absence of carbon dioxide exhalation
- Bilateral needle decompression

Circulation

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

- CPR
 - Compliant with AHA 2015 guidelines
 - Adequate chest compressions result in simulated circulation, cardiac output, central and peripheral blood pressures, carbon dioxide return
 - Correct hand placement

IV Placement/IO or IM Injections

- Bilateral IV placement sites in antecubital fossa and dorsum of hand
- IM injection site right deltoid
- Humeral IO site left deltoid
- Subclavian venous catheter

Neurological

- Blinking and reactive eyes with multiple settings
- Convulsions

Gastrointestinal

- Nasogastric tube placement
- Bowel sounds all four quadrants
- Gastric reservoir supports simulated gavage, lavage and gastric suction

Urinary

- Urinary catheterization
- Interchangeable genitalia

Articulation

• Range of motion in the wrists, elbows, knees and ankles

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

Pharmacology System

- Automatically calculates 68 intravenous and inhaled medications
- Responses are automatic, dose dependent and follow appropriate time course

Sounds

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

Secretions

Eye, nose and mouth

METIMAN PATIENT SIMULATOR More innovation for more disciplines

ABOUT THE SIMULATOR

METIman is the ideal companion for patient simulation, allowing learners to perfect their skills in gastric lavage and subclavian IV injections. With METIman, you get the perfect combination of features to meet your learning objectives.

Key Features

Airway

- Upper airway designed from CT scan data of a real human patient
- Intubation: orotracheal, nasotracheal, ET tubes, LMA, retrograde, fiber optic, right mainstem
- Breakaway teeth
- Gastric distention with esophageal intubation
- Bag-valve-mask ventilation
- Head tilt/chin lift
- Jaw thrust
- Tongue swelling
- Airway reservoir supports suctioning of fluids via tracheostomy tube
- Surgical cricothyrotomy
- Needle cricothyrotomy
- Laryngospasm
- Airway occluder
- Bronchial occluder

Breathing

- Bilateral and unilateral chest rise and fall
- Measures the presence or absence of carbon dioxide exhalation
- Spontaneous breathing
- Integrated SpO2 finger probe with patient monitor
- Bilateral chest tube insertion with fluid output
- Bilateral needle decompression

Cardiac

- Defibrillation and cardioversion using live defibrillators
- Pacing (hands-free pads)
- 12-lead dynamic ECG display

Circulation

- Bilateral blood pressure measurement via auscultation and palpation
- Bilateral carotid, brachial, radial, femoral, popliteal, posterior tibial, dorsalis pedis pulses

CPR

- Correct hand placement, depth and rate of compressions reflected in physiological feedback rather than virtual target
- Adequate chest compressions result in simulated circulation, cardiac output, central and peripheral blood pressures, carbon dioxide return

Neurological

- Reactive pupils and blinking eyes
- Convulsions

Gastrointestinal

• Gastric reservoir supports simulated gavage, lavage and gastric suction

Urinary

- Urinary catheterization
- Interchangeable genitalia

Vascular Access

- Bilateral IV cannulation with flashback in dorsum of the hands, forearms and arms
- Subclavian catheter supports intravenous infusions
- Bilateral deltoid intramuscular injection sites

Articulation

• Range of motion in the wrists, elbows, knees and ankles

Trauma

- Bleeding and fluid drainage linked to physiology
- Secretions from eyes, nose, mouth
- Two simultaneous bleeding/moulage sites with 1.5 L blood tank capacity
- Limbs can be removed at the knees and elbows

Pharmacology System

- Automatically calculates 68 intravenous and inhaled medications
- Responses are automatic, dose dependent and follow appropriate time course

Sounds

- Pre-recorded sounds and speech
- Customized sounds and vocalization via wireless microphone