

PEDIATRIC SIMULATOR

Aria

Aria, our new high-fidelity pediatric medical manikin, adds realism to educational scenarios to better prepare students and practicing professionals for the moments that matter. Training with Aria reduces medical errors, improves performance and enhances pediatric patient care.

Simulating a 7-year-old child Aria offers interchangeable gender, 60 vocal expressions and sounds, an advanced airway and neurological features, all of which enable students and clinicians to:

- Assess verbal cues, like confusion, anxiety, stress and pain
- Learn airway management skills
- Conduct neurological evaluations
- Train for pediatric emergencies as if they were really happening

In addition, this patient simulator prepares students and professionals for real-world medical scenarios by offering risk-free practice; and supports training for PALS, PEARS and APLS certifications.



INCLUDED SIMULATED CLINICAL EXPERIENCES

- Accidental Burn Injury
- Accidental Electrocution
- Accidental Overdose
- Closed Head Injury
- Diabetic Keto Acidosis (DKA) with Hypoxia
- Envenomation
- Gunshot Wound with Pneumothorax
- Obstructed Airway with Anaphylaxis
- Submersion Injury
- Trauma with Pneumothorax

LIFELIKE CARE IN ANY SITUATION

Wireless and tetherless, Aria can be put into realistic and relevant training situations, like a home or ambulance. That means learners stay in the moment, wherever that may be.

Academic programs

Reduce the need for pediatric clinical sites by leveraging Aria's lifelike responses in a risk-free environment

General/children's hospitals

Maintain life saving pediatric certifications by using Aria to refresh the skills and reflexes of nurses, doctors and healthcare professionals

Emergency medical services

Learn proper assessment, transport, handoffs and pediatric response

ARIA

Technical Specifications

MANIKIN

Dimensions: 48" H (121.92 cm)

Weight: 50 lbs. (22.68 kg)

ELECTRICAL

AC Input: 115/230V 50/60Hz

2 internal batteries: 14.4V, 6.90Ah lithium-ion, rechargeable

Manikin battery life: Approximately 5 hours

Available in two skin tones: Caucasian Black/African American

Articulation

Neck supports joint articulation with the ability to set for nuchal rigidity (stiff neck)

Realistic joint articulation in neck, shoulders, elbows, hips and knees

Forearm pronation and supination

Cardiac (assess and manage cardiac status)

Chest compression feedback and monitoring compliant with AHA CPR requirements

Effective chest compressions generate palpable femoral pulses and electrocardiogram (ECG) activity

Supports ECG monitoring using real devices/ECG monitors

Chest compression depth sensor providing real-time quality feedback and reporting

Library of over 55 cardiac rhythms

Software-based 12-lead ECG

Circulation (assess and manage perfusion status)

Bilateral palpable pulses with event detection and logging

- Carotid, brachial, radial, femoral, popliteal, dorsalis pedis

Pulse palpation event detection and logging

Blood pressure-dependent pulses

Non-invasive blood pressure with Korotkoff sounds

Variable pulse strength

Circumoral cyanosis

Peripheral capillary refill (normal, delayed, or none)

Fingerstick blood glucose testing with real equipment

Gastric and Urinary

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

Interchangeable female and male genitalia

Urinary catheterization with urine output

Orogastric/nasogastric tube (no fluids) Gastrostomy tube (with fluids)

Suppository administration

Neurologic

(perform neurological assessments to identify abnormalities/deficiencies)

SymEyes with pupil reactivity and condition presets

Pain response(oral) via sternal rub

Convulsions

Respiratory (assess and manage breathing)

Compliant with 2020 AHA BLS guidelines and 2021 ERC guidelines

Spontaneous breathing with chest rise and fall

Visible chest rise during bag-valve-mask ventilation

Variable inspiratory/expiratory ratios

Substernal retractions

Mechanical ventilation support

- Supports asynchronous volume and pressure-controlled ventilation

- Supports PEEP (up to 20 cm H₂O)

Ventilation measurement

Simulated pulse oximeter

Chest tube placement

Unilateral mid-clavicular needle decompression with detection, automatic resolution, and logging

Automatic detection, resolution and logging of mid-clavicular needle decompression

Sounds

Auscultation of normal and abnormal heart, lung, and abdominal sounds with volume control

60+ scripted male/female vocal expressions and sounds

Wireless voice capability

Vascular Access

(manage intravenous and intraosseous access for medication delivery)

Unilateral anterolateral thigh intramuscular and subcutaneous injection sites

Humeral IO (no fluids) and tibial IO (no fluids)

Antecubital venipuncture site with flashback

Pre-ported jugular catheter and dorsum of left hand

Aria Simulator Package

Aria Pediatric Simulator

Instructor operating device

Maestro standalone license

Physiology license

10 Simulated Clinical Experiences (SCEs)

StethoSym

SymDefib

Gender conversion kit

Aria Moulage Starter Kit

(set of 4 6x3 burn sticky wounds, 2 fine rash sticky wounds, 2 ecchymosis sticky wounds, pediatric injectable abdomen with protection plate and belt)

First year manufacturer's warranty

Optional Accessories

All-in-one computer for patient monitor

Tablet Computer for Patient Monitor

Spare StethoSym Devices

Optional Training

Aria includes installation and product familiarization by an Elevate Technician

Customers may elect to upgrade to the following training solutions by a Clinical educator:

1 Day SimPro On-Location

2 Day SimPro Premier at Elevate HQ

Key Features & Benefits

Airway (assess and manage airway)

Anatomically accurate oral cavity and realistic airway

Nasotracheal/orotracheal intubation (ET tube)

Retrograde and fiberoptic intubation

Transtracheal jet ventilation

Articulation to support head tilt, chin lift, and jaw thrust

Distended abdomen with esophageal intubation

LMA, i-gel® and King insertion

Oral and nasal pharyngeal airway insertion

Bag-valve-mask support and recognition

Surgical/needle cricothyrotomy

Tracheostomy

Abdominal distention with esophageal intubation

Swollen tongue, pharyngeal swelling and laryngospasm to provide challenging intubation

Automatic detection and logging of right main stem

Unilateral chest rise and lung sounds with right main stem

Bronchial occlusion

Variable lung compliance and resistance