# 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 pediatric patient, 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.
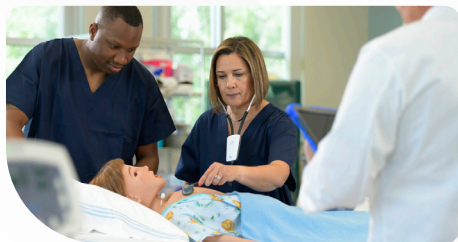
INCLUDED SIMULATED CLINICAL EXPERIENCES

- Accidental electrocution
- Accidental overdose
- Burn injury
- Closed head injury
- Diabetic ketoacidosis with hypoxemia
- Conduct neurological evaluations
- Train for pediatric emergencies as if they were really happening

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	General/children's hospitals	Emergency medical services
Reduce the need for pediatric clinical sites by leveraging Aria's lifelike responses in a risk-free environment	Maintain life saving pediatric certifications by using Aria to refresh the skills and reflexes of nurses, doctors and healthcare professionals	Learn proper assessment, transport, handoffs and pediatric response

Learn more at **elevatehealth.net**

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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: ▉ Medium ▉ Dark

Standard Equipment

- Software-compatible tablet
- Maestro instructor-driven software platform (manual mode)
- Maestro Standalone software license (1)
- 1 wireless StethoSym
- One year of Express Warranty support and maintenance
- Electronic emulated patient monitor software
- Electronic user guide
- SymDefib external defibrillator box

Optional Equipment

Patient monitor computer	Additional Maestro Standalone licenses
Additional StethoSym units	LearningSpace
Maestro physiology	

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
- Ariticulation 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

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 requiremtents.
- Effective chest compressions generate palpable femoral pulses and electrocardiogram (ECG) activity
- Supports ECG montoring 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(verbal) 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

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