OB-GYN PATIENT SIMULATOR

Lucina

Lucina delivers an all-in-one simulation experience. Designed to demonstrate both gravid and non-gravid scenarios, this wireless manikin comes with a fetus to teach proper prepartum, labor, delivery and postpartum care as well as a non-gravid abdomen for clinical situations unrelated to maternity.

Integrated with maternal-fetal physiological modeling, Lucina automatically reacts to medical interventions while the fetus cries upon delivery and senses the amount of force applied to its neck.

Packed with advanced features and multiple simulated clinical experiences, learners can:

- Evaluate anterior and posterior lung sounds
- Witness realistic uterine contractions
- Monitor vital signs and maternal data
- Hear the fetal heartbeat
- Cut and clamp umbilical cords (cord not reusable post-cut)
- Control postpartum bleeding and uterine inversions
- Perform CPR and analyze metric

This childbirth simulator supports pregnancy conditions such as breech delivery, shoulder dystocia and postpartum hemorrhage. Additional equipment is available to help teach the all-fours birthing position.

VALUABLE PREPARATION FOR QUALITY HEALTHCARE

Lucina provides a true interprofessional education (IPE) experience for learners.

General Practitioners

Detect normal and abnormal maternal-fetal vitals with authentic heart, lung and fetal sounds.

Obstetricians

Train to care for true-to-life pregnancy scenarios with realistic birth canal, uterine contractions, fetus rotations and postpartum options.

Midwives

Sharpen skills on various birthing positions and the McRoberts maneuver for shoulder dystocia.

Learn more at **elevatehealth.net**

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LUCINA

Technical Specifications

MANIKIN
Dimensions: 69" H x 22" W x 15" D (175 cm x 56 cm x 38 cm)
Weight: 111 lbs. (50 kg)

ELECTRICAL
AC Input: 100-240V, 50/60 Hz, 2.3 A
Internal batteries: 14.4V, lithium-ion, rechargeable
Maternal manikin battery life: 4 hours
Fetus battery life: 7 hours

Available in two skin tones:
Caucasian
Black/African American

FETUS
Dimensions: 19" H x 6" W x 4.5" D (48 cm x 15 cm x 11.5 cm)
Weight: 5.5 lbs. (2.5 kg)

Lucina Simulator Package
Lucina Simulator
Gravid and non-gravid abdomens
Delivery fetus with placenta
Instructor operating device
Maestro standalone license
Physiology license
10 Simulated Clinical Experiences
5 non-gravid SCEs
Lucina Moulage Starter Kit (Caesarean incision, pitting edema sticky pads, vaginal model: hemorrhoid and episiotomy model, peripheral IV catheterization hand, infant foot: screening test)
First year manufacturer's warranty

Optional Accessories
All-in-one patient computer
Tablet Computer for Patient Monitor
Advanced OBGYN accessory kit (Leopold fetus, Leopold tub, inverted postpartum uterus and SCE, supplemental static cervix set 0-90% effaced)
Urgent Obstetrics Learning Module (10 SCEs)

Optional Training
Lucina includes Installation and Product Familiarization by an Elevate Technician
Customers may elect to upgrade to the following training solutions by a Clinical educator: 2 Day SimPro On-Location 3 Day SimPro Premier at Elevate HQ

Maternal Features

Airway and Breathing
Realistic upper airway
Positive pressure ventilation including bag-valve-mask ventilation
Advanced lungs with mechanical ventilation support, including patient-triggered modes
Airway management and ventilation
Supports endotracheal tubes, nasopharyngeal and oropharyngeal airways
Spontaneous breathing with chest excursion
Lung auscultation: anterior and posterior

Cardiovascular
Correct hand placement detection for chest compressions
Advanced CPR analysis (compression depth and rate, chest recoil, compression fraction, ventilation volume and rate)
Compliant with 2020 AHA BLS guidelines and 2021 ERC guidelines
Pacing, cardioversion and defibrillation with real equipment
NIBP by auscultation and palpation
Heart sounds

Circulatory System	
Electrocardiogram (ECG) monitoring posts for interface with real ECG monitor with a library of over 50 cardiac rhythms	
Dynamic bilateral pulses: carotid, radial, brachial and dorsalis pedis	
12-lead dynamic ECG display	Variable pulse strength

Fetus
Fetal heart sounds (five locations based on fetal presentation)
Articulated fetal body and neck (with lateral neck movement), shoulders, elbows, hips and knees
Clinically accurate fetal size with tactile realism–50th percentile on the WHO growth chart
Predicted 1-minute and 5-minute Apgar scores based on fetal blood-gas values
Umbilical cord that can be cut and clamped (cord not reusable post-cut)
Programmable audible cry upon delivery
Palpable fontanel and sagittal suture
Fetal neck traction sensing
Fetal airway suctioning

Fluids	
Postpartum bleeding tank (1.8 L)	Bilateral IV arms
Urinary catheterization with urine release	Epidural infusion

Intrapartum	
Left lateral tilt with detection	Vertex and breech delivery
Zavanelli maneuver with detection	C-section team training support
Forceps application	Vacuum extraction
Realistic palpable uterine contractions	
Controllable rate and duration of contractions	
Shoulder dystocia with presentation of turtle-sign	
Trendelenburg position with detection	
McRoberts maneuver with observable/software detectable pelvic tilt	
Suprapubic pressure support and detection with palpable symphysis pubis	
Supports delivery of posterior arm during shoulder dystocia	
Rubin II and Woods: Screw maneuvers to resolve shoulder dystocia	
Intact/fragmented placenta with realistic color, texture and flexibility	

Obstetrical
Integrated maternal-fetal physiological modeling
Perineum support with accurate fetal descent and rotation
Multiple birthing positions: lithotomy, sitting and all-fours
Rectal suppository administration
Urgent obstetrical learning module
Realistic birth canal and vulva

Postpartum	
Postpartum hemorrhaging, including Class III hemorrhage	
Bimanual compression and uterine massage with detection and automatic response	
Contracted and boggy uterus	Uterine blood released upon massage
Inverted postpartum uterus	Uterine reversion
Intrauterine balloon insertion	

Prepartum
Vaginal examinations for evaluation of the cervix, fetal station and position
Static cervices represent various stages of dilation from closed to 5 cm and effacement from 0 to 90%
Leopold's maneuvers
Epidural port with infusion and aspiration

Speech	
2-way voice communication	Prerecorded speech
User-recorded speech	

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Reduce medical errors. Improve performance. Enhance patient care.