Unrivaled realism and versatility for normal and emergency childbirth scenarios

CAE Lucina allows practice in prepartum assessment and care, labor and delivery (routine and emergency), patient transport, and postpartum management, all with one wireless patient simulator. Powered by CAE's unique physiology modeling engine, with integrated maternal and fetal physiology, Lucina responds automatically to obstetric maneuvers and clinical interventions. CAE Lucina supports mechanical ventilation and offers the most complete training in shoulder dystocia, postpartum hemorrhage and other important cases.

CAE Lucina is also the most versatile simulator available today: With the female patient module, Lucina easily transforms into a non-gravid patient for practice in emergency scenarios unrelated to maternity. Add the Microsoft HoloLens module and Lucina becomes LucinaAR, the world's first childbirth simulator to offer real-time, interactive 3D holograms of anatomy for more immersive training.

Find out how CAE Lucina can redefine your expectations at caehealthcare.com.
**Maternal Features**

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

**Preparum**
- 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 50%
- Leopold’s maneuvers
- Epidural port with infusion and aspiration

**Intrapartum**
- Realistic palpable uterine contractions
- Controlable rate and duration of contractions
- Trendelenburg position with detection
- Left lateral tilt with detection
- Vertex and breech delivery
- M-Cuneo maneuver with observable pelvic tilt
- Suprapubic pressure support and detection with palpable symphysis pubis
- Supports delivery of posterior arm during shoulder dystocia
- Zavanelli maneuver with detection
- C-section team training support
- Rotation of anterior and posterior shoulder is detected in resolving shoulder dystocia (Rubin II and Woods’ Screw maneuvers)
- Forceps application
- Vacuum extraction
- Intact/fragmented placenta with realistic color, texture and flexibility

**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
- Fetal neck traction sensing
- Palpable fontanel and sagittal suture
- Fetal blood gas values
- Umbilical cord that can be cut and clamped

**Postpartum**
- Postpartum hemorrhaging, including Class III hemorrhage
- Contracted and boggy uterus
- Manual compression and uterine massage with detection and automatic response
- Uterine blood released upon massage
- Inverted postpartum uterus
- Uterine reversion (optional uterine inversion module)
- Intrauterine balloon insertion

**Key Features**

**Airway and Breathing**
- Realistic upper airway
- Positive pressure ventilation
- Bag mask ventilation
- Advanced lungs with mechanical ventilation support, including patient-triggered modes
- Airway management and ventilation
- Supports endotracheal tubes, nasal-pharyngeal and oropharyngeal Airways
- Spontaneous breathing with chest excursion
- Lung auscultation: anterior and posterior
- Spontaneous chest excursion

**Circulatory System**
- Electrocardiogram (ECG) monitoring posts for interface with real ECG monitor
- 12-lead dynamic ECG display
- Dynamic bilateral pulse: carotid, radial, brachial, and dorsalis pedis
- Variable pulse strength

**Cardiovascular**
- Correct hand placement detection
- Advanced CPR analysis (compression depth and rate, chest recoil, compression fraction, ventilation volume and rate)
- CPR metrics compliant with AHA guidelines
- Pacing, cardioversion and defibrillation
- NIBP by auscultation and palpation
- Heart sounds

**Nervous System**
- Seizure is simulated with rhythmic movement of arms and rapid blinking
- SymEyes display patient symptoms and conditions, including jaundice, hemorrhage, keyhole pupil, catarracts and bloodshot or droopy eyes
- Blinking, panning and reactive eyes with multiple settings

**Fluids**
- Postpartum bleeding tank (1.8 L)
- Bilateral IV arms
- Urinary catheterization
- Epidural infusion

**Speech**
- 2-way voice communication
- Pre-recorded speech
- User-recorded speech

*Available in two skin tones: Medium Dark*