CAE Fidelis™ Lucina childbirth simulator
Beyond exceptional

TouchPro CTG (fetal) monitor

For all the stages of labor and delivery, you can count on the wireless CAE Fidelis™ Lucina childbirth simulator. Lucina brings an impressive blend of features to the market including a more realistic and controllable birthing process, better articulation for labor and delivery maneuvers, and predicted APGAR scores based on the integrated maternal-fetal physiology. The childbirth simulator amazes with every detail including a lifelike birthing fetus with no connection ports and various delivery scenarios including shoulder dystocia.

Learners can manage shoulder dystocia by performing the McRoberts maneuver, suprapubic pressure, and the Woods' Screw and Rubin II maneuvers. Furthermore, learners can perform the Zavanelli maneuver if the scenario calls for an emergency Cesarean section. Shoulder dystocia is among 10 pre-configured scenarios that come ready to operate with the childbirth simulator. These scenarios range from normal delivery to a broad range of obstetrical emergencies to ensure learners receive the best collection of evidence-based practice.

NEW!

CAE Fidelis Lucina Female Patient Module
Enjoy year-round use by adding the non-gravid female module with five emergency Simulated Clinical Experiences (SCEs).

CAE Healthcare

Technical Specifications

Standard Equipment:

Wireless maternal mannequin

Birthing fetus

Fetus to support Leopold's maneuvers

2 abdomens (1 for delivery, 1 for prepartum and postpartum)

Postpartum uterus

Static cervices for vaginal exams

Instructor's wireless laptop

Müse operating software

TouchPro CTG monitor

3 patient profiles

10 simulated clinical experiences (SCEs)
- A normal delivery
- An instrumental vaginal delivery
- Fetal tachycardia due to maternal pyrexia
- Breech delivery
- Fetal central nervous system depression by narcotics given to the mother
- Shoulder dystocia
- Major post-partum hemorrhage due to uterine atony
- Maternal cardio-respiratory arrest
- Eclampsia
- Umbilical cord prolapse

4 SCE development licenses

CAE Assurance plan with free training for life

Electronic user's guide

Optional Equipment

Additional battery and charger
- Fully and partially inverted uterus
- Additional static cervices
- Abdominal cover for all fours birthing position (required for this position)

New! Female Patient Module with non-gravid abdomen and five SCEs
- Chronic Heart Failure Exacerbation
- Acute Respiratory Distress Syndrome
- Sepsis with Hypotension
- Brain Attack w/ Thrombolytic Therapy
- Motor Vehicle Collision with Hypovolemic Shock

Mannequin

5-foot-9, 111 pounds (50 kg)

Birthing fetus - 5.5 pounds (2.5 kg)

Electrical

Input: 100-240V, 50/60Hz, 2.3A

Internal batteries: 14.4V, Lithium ion battery

Key Features

Obstetrical
- Integrated maternal-fetal physiological modeling
- Maternal aesthetics built from real patient measurements
- Realistic birth canal and vulva/perineum supports accurate fetal descent and rotation
- Multiple birthing positions: lithotomy, sitting and all fours
- Rectal suppository administration

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

Intrapartum
- Palpable uterine contractions can be detected by palpating the fundus
- Controllable rate and duration of contractions
- McRoberts Maneuver with observable pelvic tilt is supported and detected in event log
- Suprapubic pressure support and detection with palpable symphysis pubis
- Supports delivery of posterior arm during shoulder dystocia
- Zavanelli maneuver with detection
- Trendelenburg position with detection
- Left lateral tilt with detection
- Rotation of anterior and posterior shoulder is detected in resolving shoulder dystocia (Rubin II and Woods' Screw Maneuvers)
- Vertex and breech delivery
- Fetal heart sounds–5-locations based on fetal presentation
- Forceps application
- Vacuum extraction without fetal cap
- Episiotomy
- Intact/fragmented placenta with realistic color, texture and flexibility
- Placenta can be delivered with gentle traction
- C-section team training support

Fetus
- Articulated fetal body neck (with lateral neck movement), shoulders, elbows, hips, and knees
- Birthing fetus with no connection ports at head or buttocks
- Clinically accurate fetal size with tactile realism–5th percentile on the WHO growth chart
- Palpable fontanel and sagittal suture
- Fetal neck traction sensing
- Fetal airway suctioning
- Audible cry upon delivery
- Predicted 1-minute and 5-minute APGAR scores based on venous and arterial blood gas values
- Umbilical cord that can be cut and clamped

Postpartum
- Postpartum hemorrhaging, including Class III hemorrhage
- Contracted and boggy uterus
- Bimanual compression and uterine massage
- Uterine massage detected in event log

- Uterine blood released upon massage
- Inverted postpartum uterus
- Uterine reversion
- Intrauterine balloon insertion

Maternal Features

Respiratory
- Realistic upper airway
- Advanced lungs with mechanical ventilation support
- Airway management and ventilation
- Supports endotracheal tubes, nasal-pharyngeal and oropharyngeal airways
- Spontaneous breathing
- Bag-valve-mask
- Lung sounds: anterior and posterior
- Chest excursion
- Positive pressure ventilation

Circulatory System
- Support for real 4-lead ECG that can be connected to simulator
- 12-lead ECG simulated in software
- Dynamic bilateral pulses: carotid, radial, brachial, and dorsalis pedis; pulse strength can be controlled

Cardiovascular
- Chest compressions
- Advanced CPR analysis that measures hand placement and compression depth, rate, and release, ventilation volume and rate and chest compression fraction, inspiratory-expiratory ratio, arterial blood pressure, coronary perfusion pressure, cerebral perfusion pressure, cardiac output and alveolar ventilation
- Electrical therapy
- Bilateral NIBP
- Heart sounds

Nervous System
- Seizure is simulated with rhythmic movement of arms, rapid blinking
- Reactive pupils
- Blinking
- Speech: live and pre-recorded

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

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