



## **Obstetric Solution**

# SimMom® and MamaBirthie

## Combining high and low fidelity simulation to help improve patient outcomes

SimMom® is an advanced full body birthing simulator with accurate anatomy and functionality to facilitate multi-professional obstetric training of birth management, with both manual and automatic delivery modes. MamaBirthie is a simple, easy to use obstetric training device which can be paired with a standardized patient or used as a tabletop skills trainer.

Together, SimMom and MamaBirthie offer a solution for delivering efficient and effective obstetric simulations which meet learning objectives around care, communication, and skills.

## SimMom® Features

#### Deliveries and drills

- Normal delivery
- Breech presentation
- Assisted deliveries: forceps and
- Shoulder dystocia
- Cord prolapse
- Eclampsia and preeclampsia
- Maternal collapse
- Postpartum hemorrhage (PPH)
- Sepsis
- Uterine inversion
- Ruptured uterus

#### Airway

- · Difficult airway: laryngospasm, tongue edema and pharyngeal swelling
- Right lung, left lung and both lung blockage
- Head tilt/chin lift, Jaw thrust
- Suctioning techniques (oral and nasopharyngeal)
- Bag-Valve-Mask ventilation
- Oropharyngeal and nasopharyngeal intubation
- Combitube, LMA and other airway device placement
- Endotracheal intubation (ET)
- · Retrograde intubation
- · Nasal and oral fiberoptic intubation
- Trans-tracheal jet ventilation
- Right mainstem intubation
- · Surgical and needle cricothyrotomy
- Chest tube insertion
- Vocal chords
- Supports Sellick Maneuver

#### Pelvis anatomy

- Amniotic sac
- · Dilating cervix
- · Ischial spines
- Anus for post-delivery assessment
- · Atonic uterus modules (for PPH, uterine inversion and retained placenta)
- · Fluids (e.g., blood, stained amniotic fluid and urine)
- Urine catheterization/instillation
- Placenta: complete and incomplete

#### **Breathing**

- Simulated spontaneous breathing
- Variable respiratory rates
- Bilateral and unilateral chest rise
- · Normal and abnormal breath sounds: 4 anterior auscultation sites, bilateral midaxillary sites

#### Circulation

- Adjustable BP levels: systolic/diastolic
- · BP measured manually by auscultation of Korotkoff sounds
- Bilateral carotid and brachial pulse, radial (right side only) pulses synchronized with ECG
- · Pulse strength variable with BP
- Pulse palpation is detected and logged
- Supports NIBP

#### Vascular

- Pre-ported IV access in both arms
- Subcutaneous and intramuscular injection sites
- · Volume infusion
- · Realistic flashback

#### Cardiac

- CPR: real-time compression and ventilation performance
- CPR compressions generate palpable pulses, blood pressure wave form, and ECG artifacts
- · Detection and logging of a series of compressions
- Extensive ECG library
- Heart sounds synchronized with **FCG**
- · ECG rhythm monitoring
- 12 lead ECG display
- Defibrillation, cardioversion and pacing

#### Movement

- Seizure / convulsions
- Able to position on all fours: realistic rotation of the shoulder and hip joints, legs bend at the knees, arms bend at the elbow
- · Other positions: supine, semirecumbent, left lateral, legs in stirrups, McRoberts position

#### Other

- · Sounds: bowel, heart, fetal heart, lungs
- Interchangeable pupils: normal, blown and constricted
- Patient Voice: pre-recorded and custom sounds, instructor can simulate patient's voice

#### Birthing Baby

- · Realistic weight and size of full-term neonate
- Palpable limbs and fontanelles
- Anatomical landmarks to identify presentation of baby
- Natural head flex
- Open mouth

#### **Optional Accessories**

- Automatic delivery
- Non-gravid abdomen skin
- Ultrasound training (LSUS)



### Developed in partnership with Limbs & Things

Laerdal has given SimMom an easy-touse, full-body simulation system, while Limbs & Things brings a level of realism, both in terms of anatomy and obstetric experience to the product.

## MamaBirthie Features

## MamaBirthie anatomy

- Realistic birth canal and pelvic floor to facilitate natural rotation of head as it descends
- Pelvis with palpable landmarks
- Cervix inserts of 4, 6 and 8cm dilation and effacement

#### BabyBirthie anatomy

- · Anatomical landmarks to identify presentation of baby
- Realistic neck articulation
- Palpable fontanelles
- · Simulation of chignon effect

## Deliveries and drills

- Normal delivery
- · Breech presentation

- · Assisted deliveries: forceps and
- · Shoulder dystocia
- · Vaginal examination
- Abdominal examination

#### Other

- Table clamp for skills training
- · Waist strap for wearing on a standardized patient

## **ORDERING** INFORMATION:

### SimMom 377-03050

Includes: SimMom, Birthing Baby with placenta, 4 Uteri Modules (Cervix, Amniotic Bag, PPH Module and Inverted Uterus), Consumables and Blood Pressure Cuff. MamaBirthie, BabyBirthie with placenta, Cervix Cups, Accessories and Carry Bag.

## Operation

SimMom can be operated by a LLEAP instructor computer and can utilize a simulated patient monitor. Incorporate SimCapture for a complete debriefing solution.

LLEAP Instructor Computer



Patient Monitor



SimCapture



## Services

## Optimize your investment

Our team of educators and service technicians have years of industry related experience that can help you successfully implement and sustain your simulation program. We're here to help you get the most out of your simulation training with support when and where you need it. From comprehensive long-term packages to a full range of individual solutions you may choose from:

- ValuePlus Technical Services Packages
- Educational Pathway Education Services Packages
- · On-site technical services
- · eLearning courses
- Virtual courses
- On-site educational courses
- Blended learning workshops • Help Desk phone and email support
- Self-guided how-to video library

