Improving neonatal outcomes

SimNewB®

Laerdal Neonatal Simulation Solutions
Realistic Neonatal Simulation

Why simulation?

The first few minutes of an infant’s life are very important in determining the health of the child. About 10% of all newborns require some degree of resuscitation. Because the need can arise without warning, it is important that all personnel present at a delivery be competent in neonatal resuscitation.

The Joint Commission issued a Sentinel Event Alert concluding that training and team drills for healthcare professionals are keys actions in counteracting the potential for future clinical errors and adverse events. Simulation, as a methodology, is increasingly becoming established as a means of achieving this goal.

Realistic training

Managing neonatal emergencies requires high functioning, multidisciplinary teams that possess the skills required to act swiftly and decisively. The SimNewB Neonatal Simulator has been designed to provide highly realistic patient simulation training experiences for the practice of teamwork, leadership and communication skills from the delivery room to the NICU.

Simulation training with the SimNewB simulator will help deliver the hands-on training necessary to better prepare healthcare providers for the challenges of neonatal care.
Partnering to improve neonatal outcomes

Developed in partnership with the American Academy of Pediatrics, the SimNewB Neonatal Simulator allows for new opportunities to integrate the latest technologies into neonatal training programs. Pairing SimNewB and courseware developed and validated by industry leaders allows learners to master the skills needed to care for neonatal patients, and ultimately improve patient outcomes.

American Academy of Pediatrics

A complete solution

The SimNewB simulator accurately represents a full term, 50th percentile newborn female. Measuring 21 inches and weighing 7 lbs, SimNewB can present as a limp, cyanotic newborn with no vitals or as a moving, crying vigorous newborn.

With a range of Technical and Educational Services to meet your needs, as well as a full complement of patient scenarios to ease instructor preparation time, SimNewB presents a complete simulation solution for your neonatal training program.
Treating compromised newborns demands the easiest to use, highest quality training solution

SimNewB®

SimNewB® is an interactive simulator with realistic newborn traits and lifelike clinical feedback for training for the specific needs of neonates.

Easy to use
The SimNewB simulator is designed to be easily integrated in all neonatal clinical training curricula. An innovative user interface and scenario design allows instructors to control the simulator’s responses throughout a training session with the push of a button on the SimPad or via the laptop PC.

Realistic Anatomy
With lifelike and anatomically accurate traits such as a patent umbilicus, IO access, realistic airway, spontaneous chest rise, and needle decompression, SimNewB provides realistic training experiences for a broad range of skills in order to gain exposure to critical neonatal problems.

Scalable Training Solution
SimNewB allows instructors to make their simulation training scenarios as simple or as complex as they want them to be. The simulator helps enhance the educational environment by providing consistent and realistic simulation training experiences for the novice learner to the seasoned NICU nurse.

Airway Features:
- Anatomically accurate, realistic airway
- ET tube insertion
- LMA insertion
- Sellick maneuver
- Positive-pressure ventilation
- Right mainstem intubation
- Suctioning
- Variable lung resistance
- Gastric tube insertion
- Oral and nasal intubation
- Meconium module for suction removal

Breathing Features:
- Spontaneous breathing with variable rate
- Bilateral and unilateral chest rise and fall with mechanical ventilation
- CO2 exhalation
- Pneumothorax
  - Unilateral chest movement with mechanical ventilation
  - Unilateral breath sounds
  - Unilateral needle thoracentesis, midaxillary

When used with the SimPad System, SimNewB delivers a new level of simulation mobility making training more clinically relevant.

SimPad System operation provides:
- Wireless control of the simulator
- Touchscreen remote for easy operation
- Intuitive software with Automatic and Manual Modes

OPTIONS

- SimNewB Simulator
- 226-05050
- SimPad System
- 200-30001
- Patient Simulator Peripheral Kit Complete
- 225-09001
- SimNewB Advanced PC Software
- 220-19950
- Compact Compressor
- 220-09901

*SimPad Link Box (200-30250) required for PC operation
Features and Benefits

Vascular Access:
- Patent, cuttable umbilicus with venous and arterial access for bulus or infusion
- Simulated blood flashback upon cannulation
- Intraosseous access (bilateral)

Circulation:
- Umbilical and Brachial pulse
- Blood Pressure measured manually by auscultation of Korotkoff sounds
- Pulse palpation detected and logged
- Pulses synchronized with ECG output
- Central cyanosis

Additional Features:
- Interchangeable pupils with normal, blown and constricted pupils
- Movement in all four limbs: Limp, Tone, Spontaneous Motion and Seizure

Cardiac:
- Extensive ECG Library with rates from 0 – 300 bpm
- ECG monitoring via 3-lead monitor
- Heart sounds synchronized with the ECG

Sounds:
- Vocal: Grunt breathing, crying, hiccups and others
- Lung: Normal, stridor, pneumonia and others
- Heart: Normal, diastolic murmur, systolic murmur and others

Patient Monitor (Optional):
- Highly configurable
- Touch screen operation
- Simulates several parameters including:
  - Heart rate, ECG, SPO2, Respiration Rate, and more
  - 12 lead ECG display

SimNewB can be operated from a PC enabling automatic debriefing. The event log is synchronized with video, providing immediate, detailed feedback on performance which optimizes the simulation as an educational tool.

PC operation provides:
- Web-camera recording
- Event log synchronized with patient monitor and in-room video
- Extensive vital signs library including ETCO2, PAP and more
- Radiology, Media, and Labs displayed on the ELO patient monitor

SimNewB Simulator includes:
- SimNewB: Patient Simulator
- Blood Pressure Cuff
- Set of Consumables
- Directions for Use

SimPad System includes:
- SimPad
- Link Box
- 2 AC Power Supplies
- Rechargeable Lithium-Ion Battery
- Wrist Strap
- Mankin Adapter Cable
- Protective Sleeve
- USB Cable
- Ethernet Cable
- Directions for Use

Patient Simulator Peripheral Kit Complete includes:
- Laptop PC
- USB Webcam
- USB Hub
- Audio Cable
- Computer Mouse
- Touch Screen ELO Patient Monitor

Optional Accessories:
220-03550 Congenital Anomaly Modules
220-05350 Hard-Sided Transportation Case for Mankin
210-05250 Hard-Sided Transportation Case for Peripheral Kit
220-00150 Umbilical Cords (4 pk.)
220-00350 Replacement IO Leg Kit
200-09201 12” Por table SimPad Patient Monitor
200-09301 17” Por table SimPad Patient Monitor

Courseware mapped directly to the NRP 6th Edition Textbook available on SimStore!
The complete solution

There is so much more to simulation than the patient simulator itself. That is why when we create a complete solution, we give just as much attention to the scenarios you will want to run and the ongoing educational and technical services you will require, so that you get the most out of your simulation programs now and for many years to come.

- **Patient Simulators** from Laerdal
- **Simulation Content on SimStore**
- **Laerdal Services**

Our complete line of **Patient Simulators**

The complete portfolio of Laerdal patient simulators offers quality training solutions for neonatal, infant, pediatric and adult patient care. If you would like to find out how other healthcare organizations are incorporating our products into their training programs, please visit the User Story section on our website.

Making Simulation Easier with **SimCenter**

SimCenter™ offers easy access to validated content from worldwide simulation experts so you can take advantage of their experience and get the most from every learning opportunity. You will find a wide range of scenarios that have been developed specifically for the SimNewB Simulator.

Visit [www.mysimcenter.com](http://www.mysimcenter.com) to learn how you can fully optimize your learning experience.
Laerdal Services...

supporting you all the way

The Laerdal Services portfolio offers comprehensive Educational Services to support your implementation goals, and extensive Technical offerings to meet your simulator servicing needs. From simulator installation, routine preventive maintenance, product orientation and operation through to helping you realize your learning objectives and incorporating scenarios, Laerdal Services are available to help make your simulation-based training program a success!

Please contact your local Laerdal representative for full details about the following services:

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Educational Services*

**Introduction Course**
On completion of this two-day course, participants will be able to prepare, operate the simulator’s user interface, and program and run scenarios using an instructional design process.

**Update Course**
Ideal for refresher training and updating your simulation skills.

**Continuous Education Courses**
We also offer scenario programming courses and custom courses to help you build competency and proficiency with your simulator(s).

**SimPad System Courses**
In addition to SimNewB courses, SimPad courses are available to help introduce and integrate the SimPad System into your simulation based educational program.

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Technical Services*

**Installation**
A stress-free set-up of the simulator combined with basic operator training at your facility.

**Preventive Maintenance Programs**
The simplest way to control costs with planned services so that corrective repairs can be avoided when your training programs can least afford them.

**Extended Warranties**
A valuable agreement option that serves to reduce or eliminate unexpected repair expenses. They can be purchased in single-year increments.

**ValuePlus Service Programs**
For the ultimate in product services, we have created the ValuePlus Service programs to provide comprehensive product protection and generous savings to suit flexible budgets and needs.

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*Services available may differ between countries
A Legacy of Learning

Laerdal has been at the cutting edge of innovative healthcare training since the launch of Resusci Anne in 1960.

Today, this extensive experience comes to the fore with the addition of SimNewB into our comprehensive range of patient simulators. Through the creation of high quality simulation solutions, we are committed to increasing the potential and scope of this most valued training methodology in support of our long held mission - helping save lives.