



# CHEES Equipment: Hospital Center for Specialized Health Training

Advanced training for professionals in the healthcare sector

January 2026



# **Presentation of the CHEES Project**

## **Metropolitan Hospital**

## **Health Services of the State of Nuevo León.**



# Metropolitan Hospital SSNL

- ✓ Located at Av. Lic. Adolfo López Mateos 4600, Floridos Bosques del Nogalar, 66480 San Nicolás de los Garza, N.L
- ✓ On May 25, 2025, the Metropolitan Hospital celebrated 40 years of providing service to the community that does not have the right to it.
- ✓ The Metropolitan Hospital has had a very strong community impact by providing more than 46 thousand outpatient consultations, one million 200 thousand laboratory studies and more than 128 thousand imaging studies each year.
- ✓ It was also a national benchmark during the care of the COVID-19 pandemic by being recognized as the unit with the greatest capacity for the care of patients with this diagnosis with 270 beds and more than 70 thousand care provided during this stage.



## Executive Summary

### Objective

- Constant and highest quality training available for resident medical staff, medical interns, as well as nursing interns, medical students, technicians and health personnel increasing the development of psychomotor skills and abilities.

### Current situation

- Need for training of medical personnel, nurses and related areas.
- More than 180 thousand medical and health care.
- More than 300 infections and adverse events.

### Desired situation

- Have medical and nursing staff highly trained in the use of simulation technologies safely in a controlled environment.

### Challenges

- Enabling the space designated for this project
- Purchase of specialized equipment

### Proposed Solution

- CHEES Hospital Health Training Center

## Headquarters and human talent trainer

**310 resident doctors**

**106 medical interns and  
interns**

**150 nursing interns**

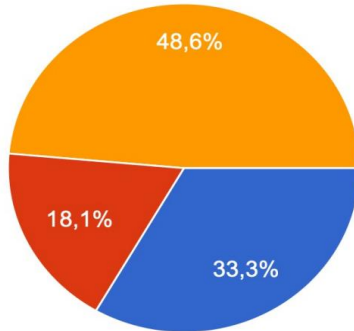
**400 medical students  
and related technicians**

**1,500 health personnel**

- Second level of care
- It is part of the N.L. State Health System.
- Reference in the Northeast of Mexico
  - More than 180 thousand medical and health care
  - Over 300 infections and adverse events
  - High demand for medical care
  - Increase in hospital stay
  - Increased risk of dying
- Population:
  - Patients without social security
  - Highly vulnerable
  - Migrants

# Community Study

Nivel de formación:  
177 respuestas



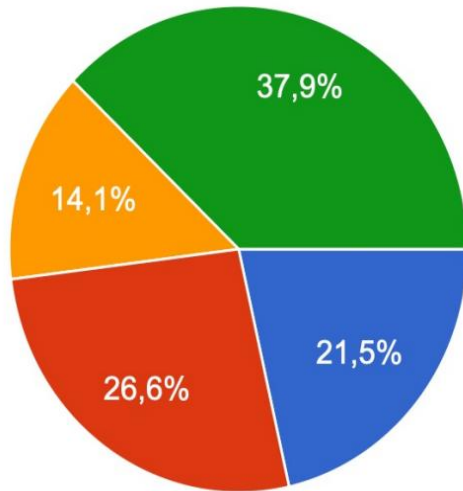
- Interno de pregrado
- Pasante de servicio social
- Residente





### Experiencia previa con simulación clínica

177 respuestas



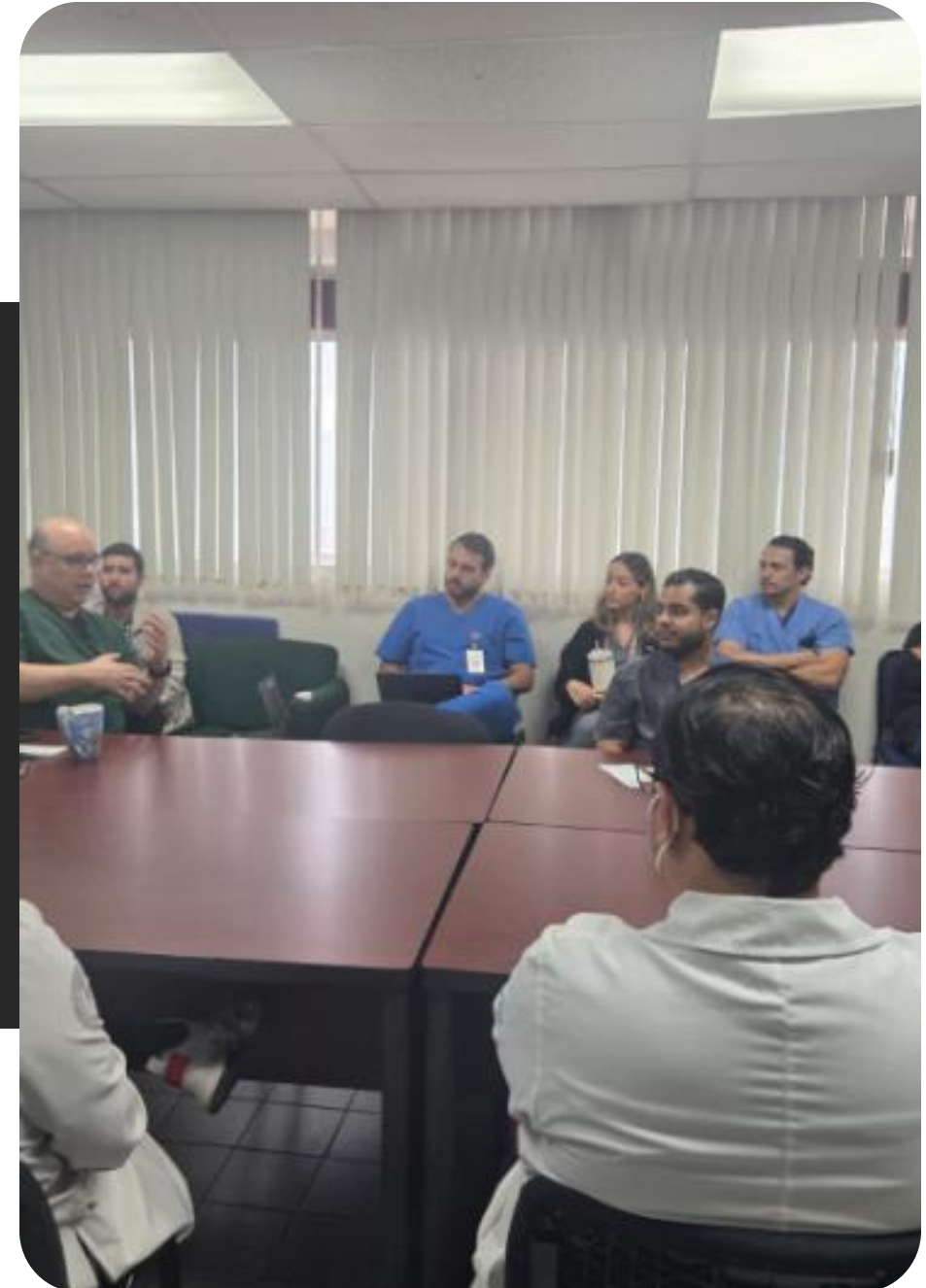
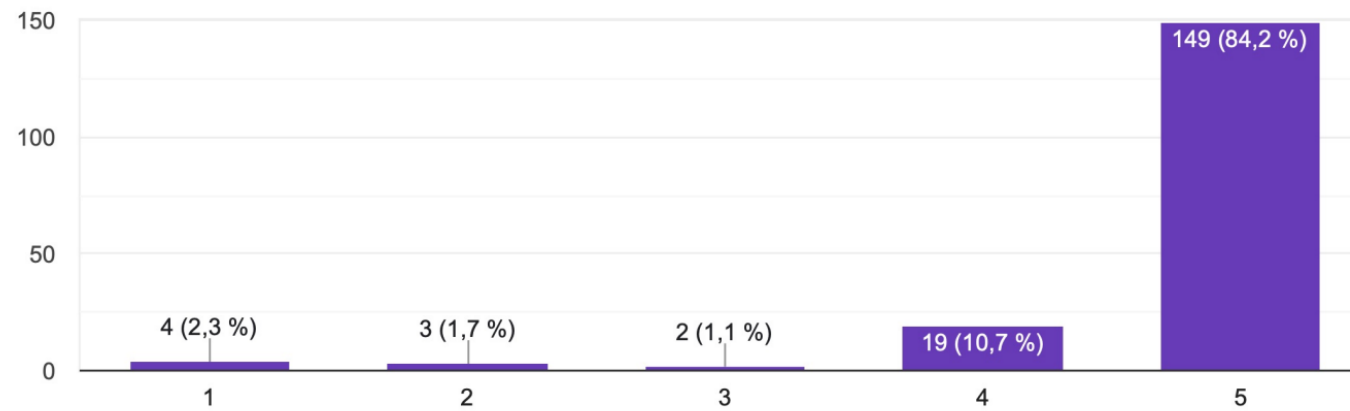
- Ninguna
- 1-2 experiencias
- 3-5 experiencias
- Más de 5





La simulación clínica es una herramienta útil para el aprendizaje en medicina. (1 = Totalmente en desacuerdo, 5 = Totalmente de acuerdo)

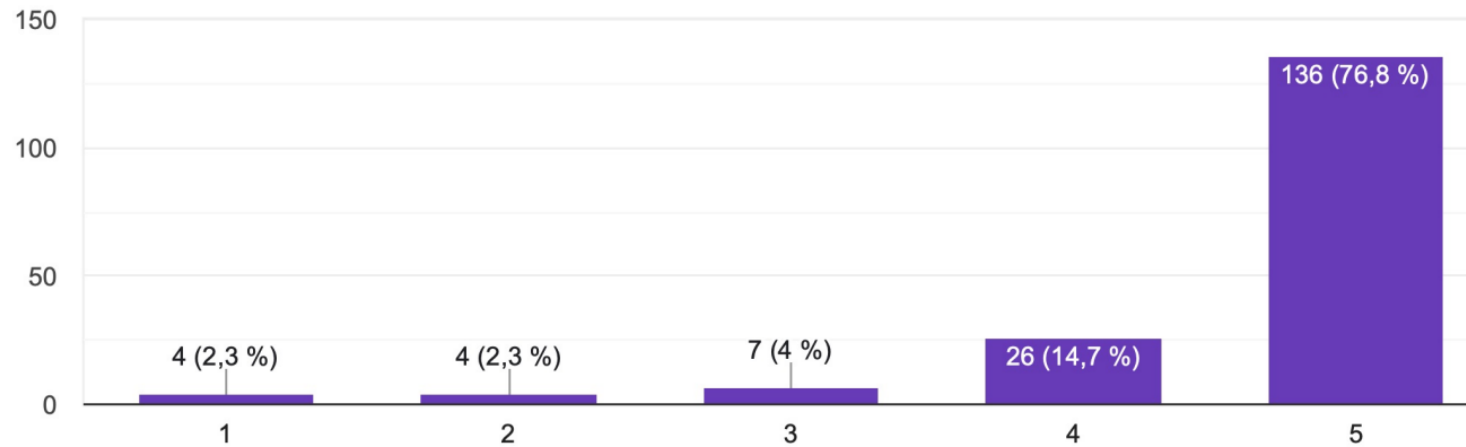
177 respuestas





La simulación mejora mi confianza al enfrentar situaciones clínicas reales. (1 = Totalmente en desacuerdo, 5 = Totalmente de acuerdo)

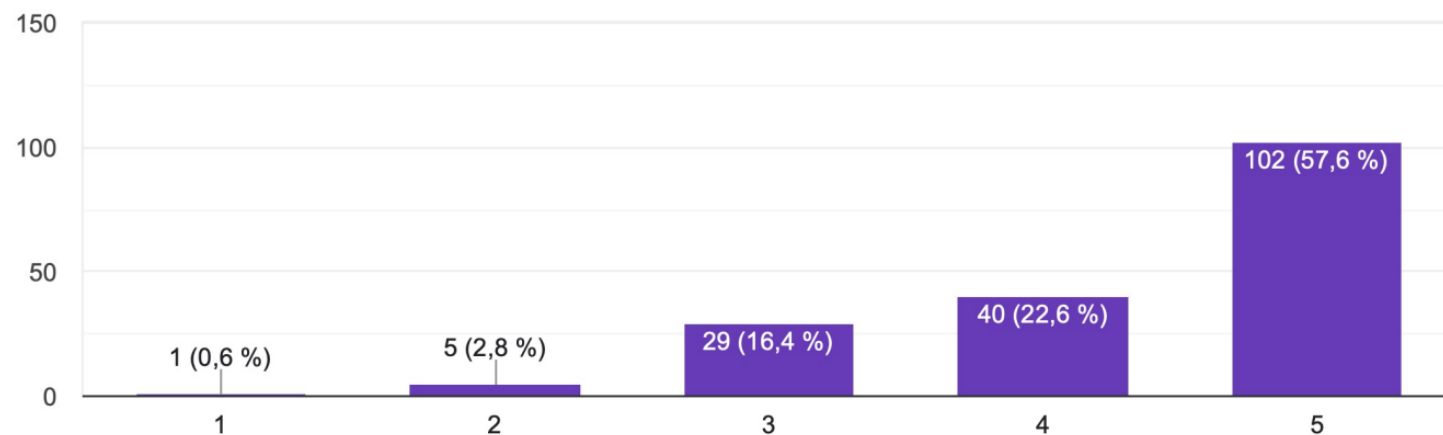
177 respuestas





Me gustaría que la simulación clínica ocupe un lugar más importante en mi plan de estudios. (1 = Totalmente en desacuerdo, 5 = Totalmente de acuerdo)

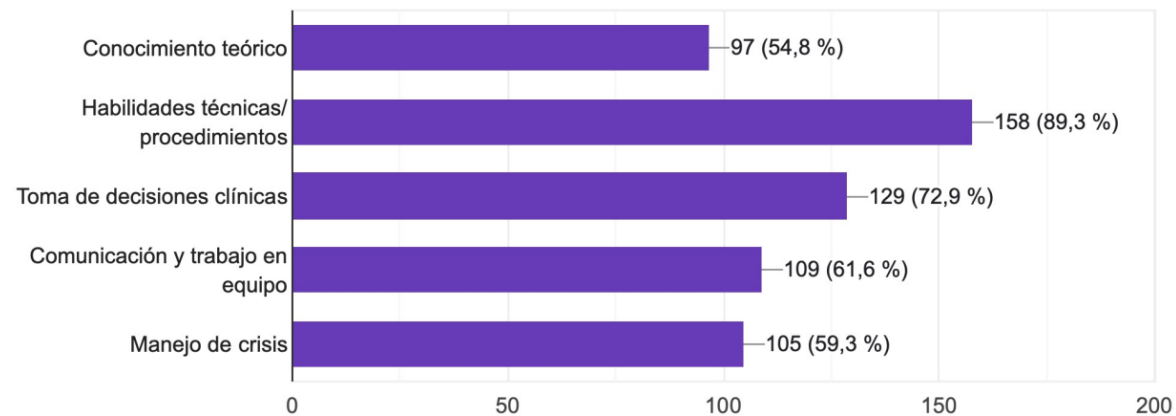
177 respuestas





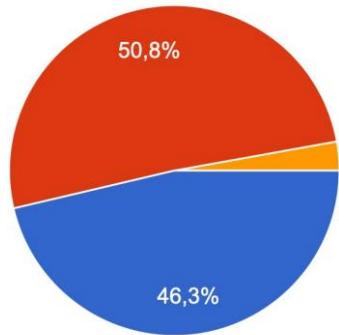
### ¿Qué competencias crees que se fortalecen más con la simulación?

177 respuestas





El número de experiencias de simulación en mi formación ha sido:  
177 respuestas



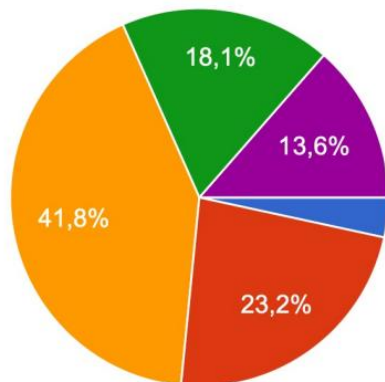
- Insuficiente
- Adecuado
- Excesivo





En comparación con la enseñanza en pacientes reales, la simulación es:

177 respuestas

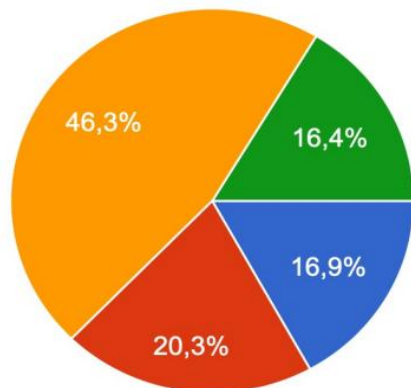


- Mucho menos útil
- Algo menos útil
- Igualmente útil
- Algo más útil
- Mucho más útil



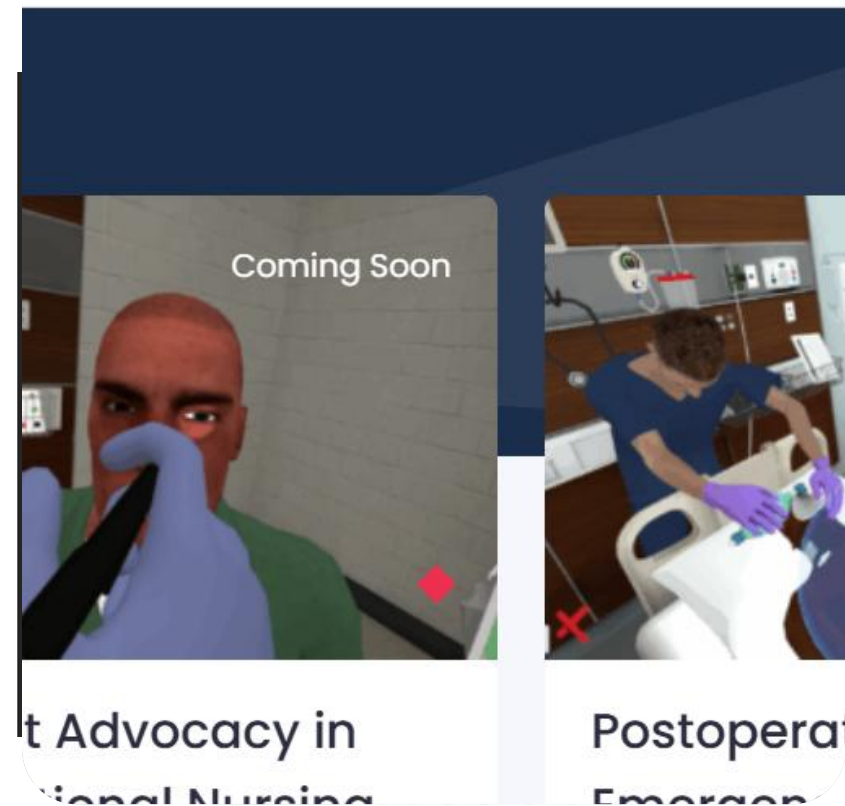
De los siguientes tipos de simulación clínica, ¿Cuál consideras es el que aporta habilidades más valiosas considerando el contexto del hospital?

177 respuestas



- Simulación de pacientes estandarizados (actores entrenados para simular padecimientos específicos, habilidade...
- Simulación basada en tareas (maniqués estáticos de procedimientos/técnicas específicas ej. brazo para venopunció...
- Simulación de escenarios clínicos (maniqués de cuerpo completo en cont...
- Simulación virtual/digital (uso de realidad virtual/pantallas interactivas p...

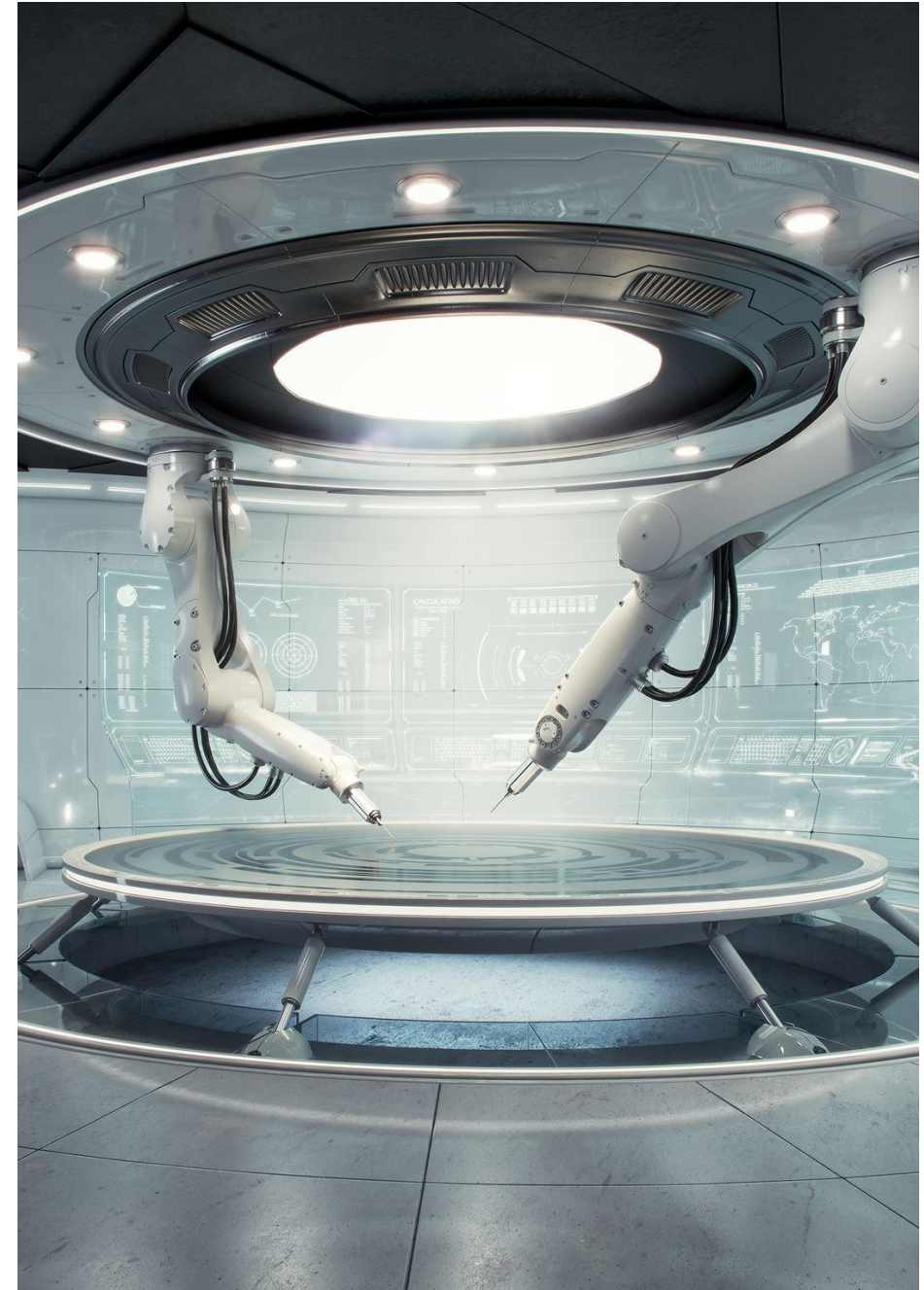
## Quality Simulated Patient





# Impact Objectives

- Transmit innovation, professionalism and commitment to excellence in health.
- Strengthen clinical training through medical simulation.
- Reduce infections and adverse events.
- Train highly qualified personnel for safe care.





## Importance of Medical Simulation

Medical simulation allows clinical skills to be trained in safe environments, reducing risks for patients and students.

## Technological innovation at CHEES

CHEES offers an innovative space with advanced technology to guarantee a comprehensive preparation of professionals.

## Educational quality and accreditation

Simulation contributes to educational quality, international accreditation and continuous improvement in healthcare.

## Responding to real needs

The project responds to a real institutional and social need, aligning itself with global trends in medical education.





## Context and Need

### Lack of medical simulation

The absence of a comprehensive simulation center limits practical preparation and reduces the educational quality in the institution.

### Impact on competitiveness

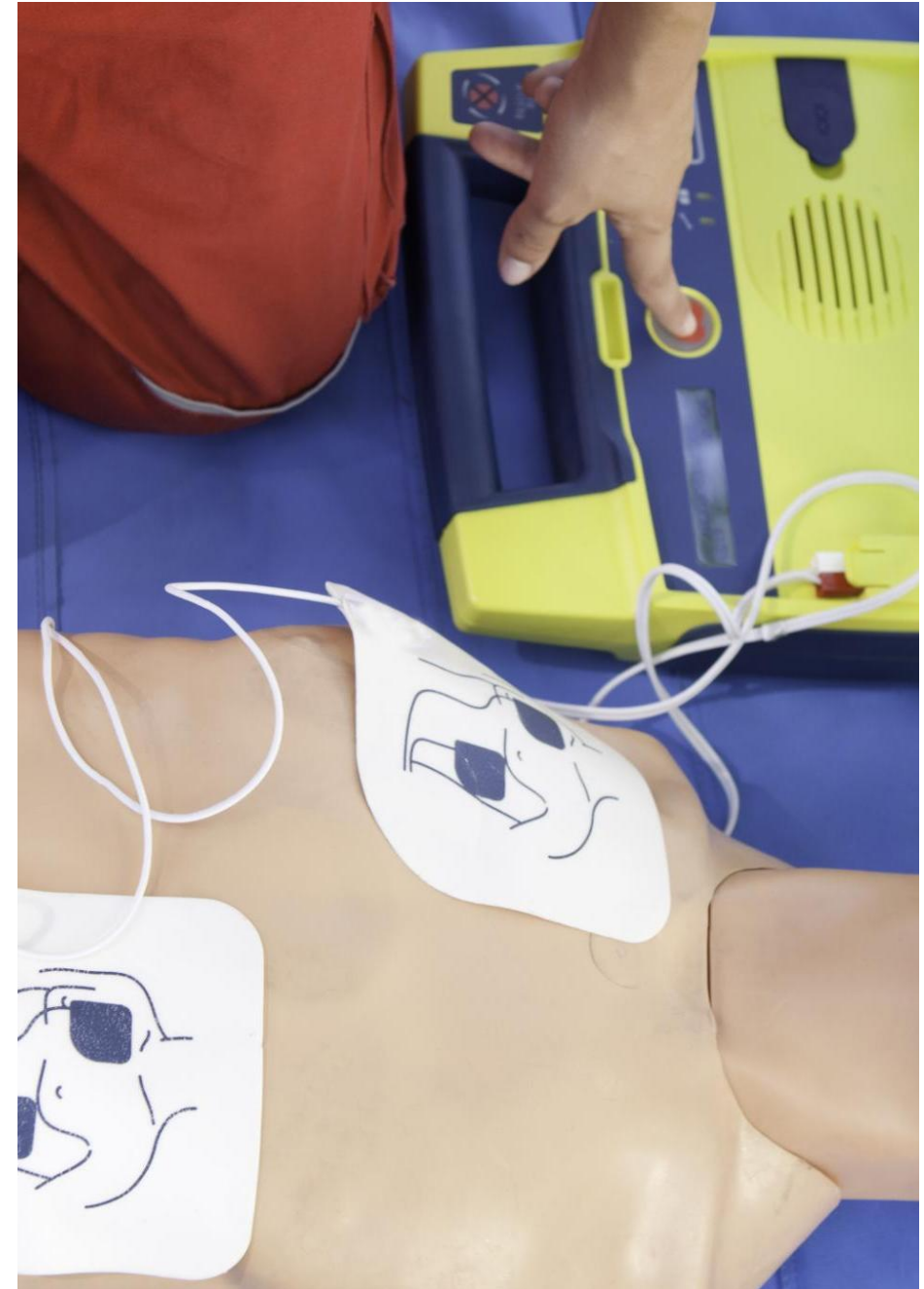
The lack affects academic competitiveness and the ability to comply with international standards in medical education.

### Urgent need for equipment

It is essential to have specialized equipment to develop safe and effective clinical competencies in students.

### Solution with CHEES

CHEES will close the educational gap, positioning the institution as a leader in educational innovation in health.





## Project Proposal

### Advanced Simulation Equipment

High-fidelity simulators and manikins allow real-world clinical scenarios to be recreated for safe practice.

### Specialized simulation software

Advanced software facilitates the creation of clinical scenarios and the real-time assessment of competencies.

### Ergonomic furniture

Furniture designed for comfort and functionality, optimizing the clinical learning environment.

### Technology integration for evaluation

Technological integration makes it possible to evaluate clinical competencies in real time, improving comprehensive training.



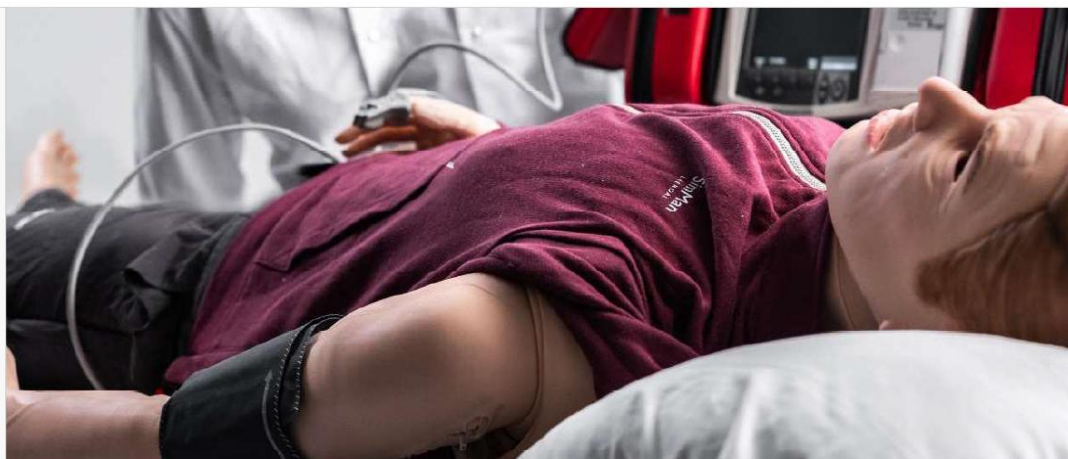


# VIDEOS

- <https://www.youtube.com/watch?v=d-pZEjvT62M>



## Budget



### Immersive training for emergency care procedures

#### SimMan® 3G PLUS

A realistic, full body adult patient simulator, SimMan 3G PLUS is easy to operate and designed for a fully immersive simulation experience. SimMan 3G PLUS features interchangeable face skins, articulating arms, and the ability to train with real clinical devices.

Learners can perform individual or interdisciplinary team training, practicing critical skills such as decision-making, team communication, and patient care, all in a risk-free environment. Practice equitable care, integrating advanced clinical features to help prepare learners for real-world situations that improve patient outcomes.



## SimMan® 3G PLUS

#### MULTIPLE AIRWAY SKILLS/FEATURES

- Controllable open/closed airway; automatically or manually controlled
- Head tilt/Chin lift
- Jaw thrust w/articulated jaw
- Suctioning (Oral & Nasopharyngeal)
- Bag-mask ventilation
- Nasal cannulation
- Orotracheal/Nasotracheal intubation
- Combitube, LMA, and other airway placement
- Endotracheal tube intubation
- Retrograde intubation
- Fiberoptic intubation
- Transtracheal jet ventilation
- Needle/Surgical cricothyrotomy
- Variable lung compliance – 4 settings
- Variable airway resistance – 4 settings
- Right main stem intubation
- Stomach distention

#### AIRWAY COMPLICATIONS

- Detection of proper head position
- Can't intubate/Can ventilate
- Can't intubate/Can't ventilate
- Tongue edema
- Pharyngeal swelling
- Laryngospasm
- Decreased cervical range of motion
- Trismus

#### BREATHING FEATURES

- Simulated spontaneous breathing
- Bilateral and unilateral chest rise and fall
- CO<sub>2</sub> exhalation
- Normal and abnormal breath sounds
  - 5 anterior auscultation sites
  - 6 posterior auscultation sites
- Oxygen saturation and waveform

#### BREATHING COMPLICATIONS

- Cyanosis
- Needle thoracostomy – bilateral
- Unilateral & Bilateral chest movement
- Unilateral, Bilateral & lobar breath sounds
- Chest tube insertion - bilateral

#### CARDIAC FEATURES

- Extensive ECG library
- Heart sounds – four anterior locations
- ECG rhythm monitoring (4 wire)
- 12 lead ECG display
- Defibrillation and cardioversion using live defibrillation pads or paddles
- Pacing

#### CIRCULATION FEATURES

- Oscillometric BP measurement
- Carotid, femoral, brachial, radial, dorsalis pedis, popliteal and posterior tibialis pulses synchronized with ECG
- Pulse strength variable with BP
- Pulse palpation is detected & logged

#### VASCULAR ACCESS

- Bilateral preported IV access
- Bilateral humeral IO
- Tibial IO
- Bilateral deltoid IM

#### CPR

- Compliant with current Guidelines
- CPR compressions generate palpable pulses, blood pressure waveform, and ECG artifacts
- Realistic compression depth and resistance
- Detection of depth, release and frequency of compressions
- Real time feedback on quality of CPR

#### EYES

- Blinking - slow, normal, fast and winks
- Open, closed and partially open
- Pupillary accommodation:
  - synchrony/asynchrony
  - normal and sluggish speed of response

#### OTHER FEATURES

- Interchangeable head skins
- SpO<sub>2</sub> measurement with pulse oximeter
- Seizure/Fasciculation
- Bleeding
  - Simulation of bleeding at multiple sites
  - Arterial and venous
  - Vital signs automatically respond to blood loss & therapy
  - Works with various wound modules & moulage kits
- Urine output (variable)
- Foley catheterization
- Secretions
  - Eyes, Ears, Nose
  - Blood, Mucous, CSF, etc.
- Diaphoresis
- Bowel Sounds – four quadrants
- Patient Voice
  - Pre-recorded and custom sounds
  - Instructor can simulate patient's voice-wirelessly
- Instructor Communication
  - Multiple instructors communicate using integrated voice over IP
- Fully articulating pelvis
- Leg rotation in all natural directions
- Articulating arms

#### PHARMACOLOGY

- Extensive drug formulary
- Automatic or programmable physiological responses

#### CERTIFICATIONS

- UL, CE, FCC, CSA

#### FEATURES

- Wireless instructor computer with LLEAP software
- Control multiple manikins from 1 interface
- Control simulation from anywhere on your network
- Use Manual Mode to run "on-the-fly" for total control over all parameters
- Utilize Automatic Mode with pre-programmed scenario for a simple and standardized way to run a simulation
  - Patient cases utilizing physiological and pharmacological models
  - Pre-programmed scenarios
  - Self-authored content
- Simulation controls; fast forward, pause, rewind, save/restore
- Profile editor
- Future prediction and patient outcome display
- Integrated video debriefing
- Time stamped activities, vital signs, and instructor comments are captured in the event log

#### PATIENT MONITOR

- Touch-screen simulated patient monitor provides concise clinical feedback for physiological parameters
- The monitor's color screen is configurable and provides multiple simulated parameters, each presenting multi-level alarms
- Simulated parameters include ECG (2 traces), SpO<sub>2</sub>, CO<sub>2</sub>, ABP, CVP, PAP, PCWP, NIBP, TOF, Cardiac output, Temperature (core and peripheral), additional and programmable parameters e.g. ICP
- X-Ray Display
- 12 Lead ECG
- Custom Image Display
- Custom Video Display
- Oxygen saturation and waveform

## Budget

### SimMan 3G PLUS - Simulador Hombre

Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	212-03350	SimMan 3G PLUS Light Manikin and Accessories	\$2,703,853.00	\$2,703,853.00
1	400-10201	Laptop Laptop	\$57,785.00	\$57,785.00
1	400-29301	All In One Panel PC All In One Panel PC	\$66,757.00	\$66,757.00
1	212- EDGS100	SimMan 3G Course Getting Started	\$37,896.00	\$37,896.00
1	210-84050	Visita de Capacitación y Viáticos.	\$26,500.00	\$26,500.00
			<b>Total:</b>	<b>\$2,892,791.00</b>



## MamaAnne™

### Avanzar en la supervivencia y la atención materna

Para hacer frente a la crisis de salud materna es esencial entrenar a los profesionales del área de la salud para que presten una atención de alta calidad durante las emergencias obstétricas críticas. MamaAnne, nuestro simulador de parto de alta fidelidad, se centra en la relevancia clínica, la configuración rápida y la modularidad para promover el realismo, la facilidad de uso y la adaptabilidad.

MamaAnne permite a sus equipos cumplir los requisitos de competencia, fomentar la inclusión y apoyar el crecimiento de la simulación a medida que avanza la atención materna.



### Características

#### Simulacros y partos

- Parto en occipitio anterior
- Parto en occipitio posterior
- Parto de nalgas
- Distocia de hombros
- Eclampsia y preeclampsia
- Hemorragia postparto (HPP) con útero interno o Clean Bleed Mat
- Reservorios de sangre internos de 1.5 l y externos de 5.0 l
- Partos asistidos: fórceps y ventosa
- Colapso materno
- Sepsis
- Prolapso del cordón umbilical
- Expulsión de la placenta

#### Anatomía de la pelvis

- Espinas isquiáticas
- Hueso púbico
- Cateterismo urinario
- Depósito de orina de 375 ml
- Compresión bimanual
- Ano para la evaluación posterior al parto
- Simulación de supositorios rectales

#### Abdomen

- Contracciones palpables
- Útero atónico y tónico
- Detección de presión suprapúbica
- Sonidos cardíacos fetales
- Compatible con Laerdal-SonoSim Ultrasound Solution 2.0

#### Vías respiratorias

- Vías respiratorias realistas con úvula, cuerdas vocales y esófago
- Edema de lengua
- Obstrucción pulmonar bilateral y unilateral
- Inclinación de cabeza/elevación del mentón
- Desplazamiento de mandíbula con mandíbula articulada
- Técnicas de aspiración (oral y nasofaríngea)
- Ventilación con bolsa y máscara
- Intubación orofaríngea
- Intubación nasofaríngea
- Combitube, LMA y colocación de otros dispositivos para las vías respiratorias
- Intubación endotraqueal
- Intubación por fibra óptica nasal y oral
- Intubación del bronquio derecho
- Compatible con la maniobra de Sellick

#### Respiración

- Respiración espontánea sincronizada con la frecuencia respiratoria seleccionada (de 0 a 60 rpm)
- Frecuencias respiratorias variables
- Sitios de auscultación del sonido pulmonar anterior y posterior
- Compatible con ASL 5000™ Lung Solution

#### Sistema vascular

- Acceso intravenoso integrado en ambos brazos
- Sitios de inyección subcutánea e intramuscular
- Acceso intradseo
- Infusión de volumen

#### Circulación

- Niveles de PA ajustables: sistólica/diastólica
- PA medida manualmente por auscultación de sonidos de Korotkoff
- Pulso bilateral carotídeo, braquial, radial, femoral y pedio, sincronizados con ECG
- Fuerza de pulso variable con PA
- Se detecta y se registra la palpación del pulso
- Compatible con PANI

#### Sistema cardíaco

- Las compresiones de RCP generan pulsos palpables, forma de onda de presión arterial y artefactos en el ECG
- Profundidad y resistencia de compresión realistas
- Detección de profundidad, liberación y frecuencia de compresiones
- Comentarios en tiempo real sobre la calidad de la RCP
- Amplia colección de registros de ECG
- Sonidos cardíacos sincronizados con ECG
- Monitoreo del ritmo de ECG cuando se utiliza con monitor de paciente simulado

#### Movimiento

- Articulación completa de brazos y piernas
- Capacidad de colocarse en posición de cuadrupedia: mecanismo de bloqueo del brazo de 90 grados, rotación realista de las articulaciones del hombro y la cadera, y flexión de piernas en la rodilla
- Se sienta sin ayuda con articulaciones de la cadera completamente articuladas
- Convulsiones
- Otras posiciones: decúbito supino, semireclinado, lateral izquierdo, litotomía y McRoberts

#### Bebé recién nacido

- Peso y tamaño realistas de recién nacido a término
- Extremidades y fontanelas palpables
- Puntos de referencia anatómicos para identificar la presentación del bebé
- Cordón umbilical cortable
- Flexión natural de la cabeza
- Boca abierta

#### Otras

- Voz del paciente: sonidos pregrabados y personalizados, el instructor puede simular la voz del paciente
- Ojos que parpadean con velocidad de parpadeo ajustable
- Capacidad de cerrar, abrir, o cerrar parcialmente los ojos como señal de conciencia
- Adaptación para pupilas:
  - Sincronía/asincronía
  - Velocidad de respuesta normal y lenta

#### Controles de software

- Monitor de paciente con pantalla táctil simulada
- El uso de LLEAP ofrece parámetros simulados adicionales, como CO2, PVC, PIC, agente anestésico, TOF, gasto cardíaco y más. Además, las opciones de monitoreo de LLEAP pueden mostrar radiografías e imágenes y videos personalizados
- Monitoreo fetal electrónico simulado
- Compatible con VitalsBridge™ FM

**Mama Anne - Simulador Parto**

Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	380-00250	MamaAnne Dark Includes: MamaAnne Dark Manikin, Birthing Baby with Placenta, Incomplete Placenta with Retained Parts, Delivery and Transition to PPH Belly with Palpable Contractions, Boggy and Firm Uterus, Advanced PPH Uterus with Cervix, Cephalic and Breech Clamps, 2x Clean Bleed Mat, Set of Consumables, Gown, Quick Setup Guide, User Guide, and MamaBirthie.	\$1,591,889.00	\$1,591,889.00
1	370-00033	MamaBirthie Dark with C-section Module	\$0.00	\$0.00
1	400-10201	Laptop	\$57,7	
1	400-29301	All In One Panel PC	\$66,7	

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**Mama Anne - Simulador Parto**

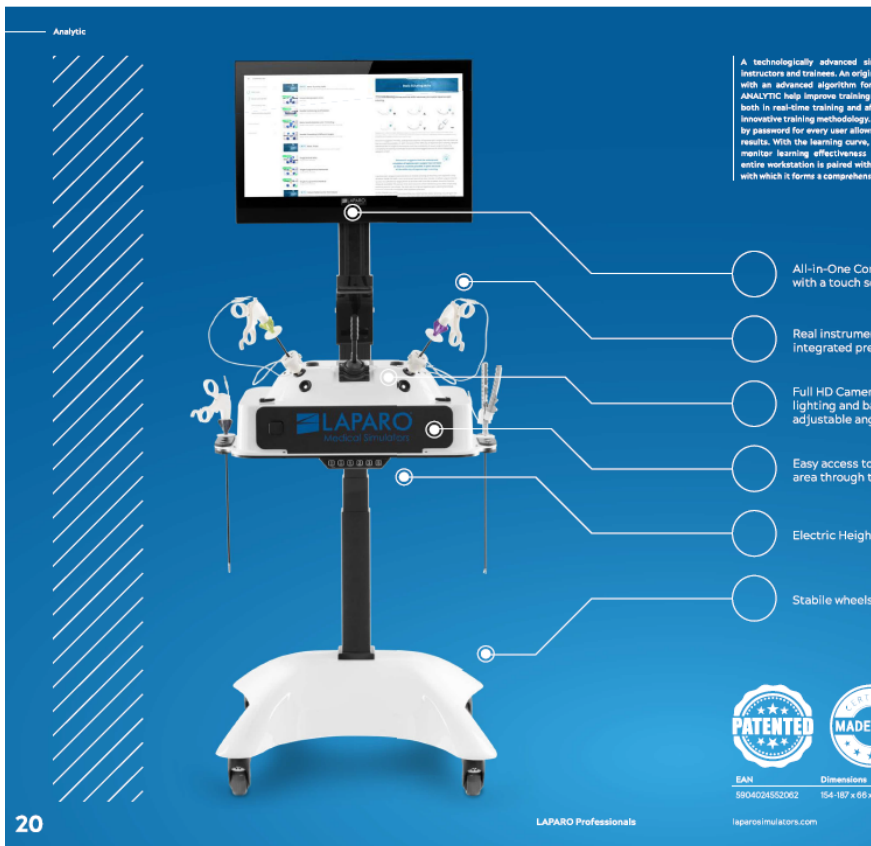
Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	400-01050	LLEAP Software License	\$159,805.00	\$159,805.00
1	212-29650	Headset and Mic with USB	\$2,829.00	\$2,829.00
1	380-EDGS100	MamaAnne On-Site Course Getting Started (One day) One day on customer site for up to 8 participants. Course gives participants knowledge of the simulator and Instructor device operations, operating modes, and system features. Hands-on activities familiarize faculty with simulator and its applications.	\$50,433.90	\$50,433.90
1	210-84050	Visita de Capacitación y Viáticos.	\$26,500.00	\$26,500.00
<b>Total:</b>				<b>\$1,955,998.90</b>

### Laparo Analytic Simulador

Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	TST-MEMO	Skills Trainers Memo TST <div>Laparo Analytic 5904024552062</div>	\$751,894.00	\$751,894.00
<b>Total:</b>				<b>\$751,894.00</b>

### Modulos de Procedimientos

Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	TST-MEMO	Skills Trainers Memo TST <div>Modulo de Cholecystectomy # 5904024555247</div>	\$4,561.70	\$4,561.70
4	TST-MEMO	Skills Trainers Memo TST <div>Cholecystectomy, replaceable pad # 5904024555735</div>	\$1,730.00	\$6,920.00
5	TST-MEMO	Skills Trainers Memo TST <div>Modulo de General Surgery set # 5904024556176</div>	\$8,336.00	\$41,680.00



**Modulos de Procedimientos**

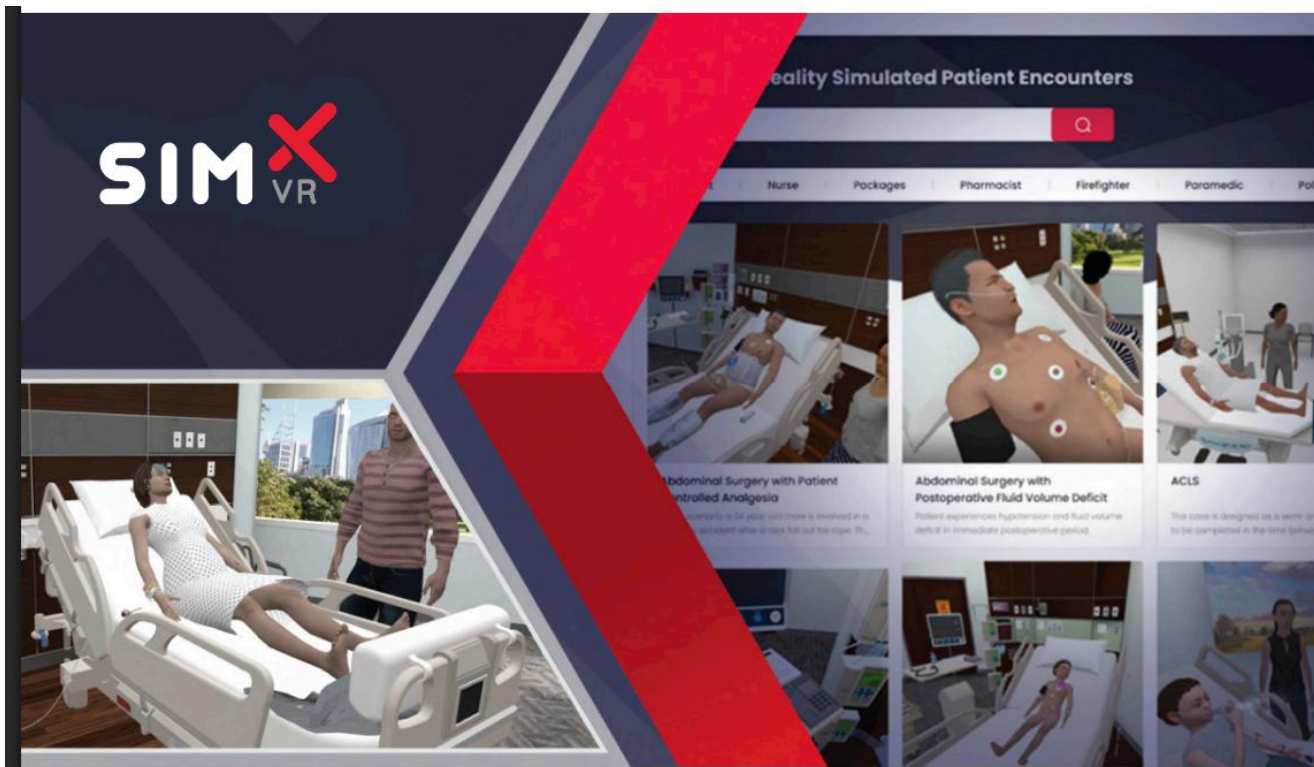
Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	TST-MEMO	Skills Trainers Memo TST <div>Modulo de Prostatectomy # 5904024555155</div>	\$6,134.00	\$6,134.00
4	TST-MEMO	Skills Trainers Memo TST <div>Prostatectomy set or replacement pads # 5904024555742</div>	\$2,044.00	\$8,176.00
1	TST-MEMO	Skills Trainers Memo TST <div>Modulo Gastric Bypass # 5904024555919</div>	\$5,505.00	\$5,505.00
4	TST-MEMO	Skills Trainers Memo TST <div>Gastric Bypass replaceable pads # 5904024556084</div>	\$1,730.00	\$6,920.00
5	TST-MEMO	Skills Trainers Memo TST <div>Modulo Bariatric Full set # 5904024555933</div>	\$8,336.00	\$41,680.00
<b>Total:</b>				<b>\$121,576.70</b>



Total Productos:	\$873,470.70
Gastos de envío:	\$3,000.00
Otros Cargos:	
IVA:	\$140,235.31
<b>Total:</b>	<b>\$1,016,706.01</b>

# Virtual Reality

## VR Simulated Patient Encounters for Physicians



*Simulated Patient Encounters built in collaboration with top institutions*

### PATIENT ENCOUNTER COLLABRATOR

- **ACLS Knowledge Update** - Air Methods
- **Anaphylaxis** - SimX
- **Bronchiolitis [PALS]** - Bundle Of Rays/Queensland Health
- **Chest Pain ACLS** - Bundle Of Rays
- **Chest Pain In The Ed [ACLS]** - SimX
- **Climbing Accident And Rescue** - Air Methods
- **Covid-19 Ed Evaluation** - SimX
- **Covid-19 Triage** - SimX
- **Epileptic Seizure** - Insepsital
- **Geriatric Fall** - Dymstec-Nambu
- **GI Bleed** - Ohio State
- **Goals Of Care Discussion** - Maimonides
- **HCom [PALS]** - SimX
- **Hypotension Post Thoracic Aortic Aneurysm** - UPenn
- **Inferior Stemi** - SimX
- **MCA Stroke Team Activation In Field** - SimX
- **Motor Vehicle Accident [ATLS]** - SimX
- **Postpartum Hemorrhage** - Bundle Of Rays/Queensland Health



# Suggested Case Packages

**NOTE:** These are only recommendations. Customers can choose any cases from the [SimX Marketplace](#) a la carte.

## Nursing:

Aggressive Behavior Management for Dementia Patient  
 Community Health Nurse Experience  
 Cumulative Complex Patient  
 Domestic Violence  
 Hip Fracture P.E.  
 Lung Cancer: Pneumothorax  
 Multiple Patients Prioritization  
 Pediatric Tonsil and Adenoid  
 Postpartum Depression  
 Postpartum Hemorrhage  
 Posttraumatic Stress Disorder  
 Risk Assessment

## EMS:

EMS MCA Stroke  
 EMS: Anaphylactic Respiratory Failure  
 EMS: Combative Suicidal Intent  
 EMS: Congestive Heart Failure  
 EMS: Diabetic Emergency  
 EMS: Electrocutation  
 EMS: Obstetrics Emergency  
 EMS: Pediatric Hypovolemic Shock  
 EMS: Pediatric Overdose  
 EMS: Pool Accident  
 EMS: Stabbing  
 Inferior STEMI  
 Motor Vehicle Trauma (Resuscitation)

## Hospital:

Aggressive Behavior Management for Dementia Patient  
 Chest Pain in the ED (Resuscitation)  
 Goals of Care Discussion  
 Medical/Surgical UTI/DKA  
 Pediatric Dysrhythmia (Resuscitation)  
 Post-op Mobility and Elimination

Postoperative Assessment and Care  
 Sepsis  
 Severe Trauma  
 STEMI V-Fib Arrest  
 Tracheostomy Complications – Chronic  
 Tracheostomy with Tracheoinnominate Fistula  
 Urinary Tract Infection

GOBIERNO DE  
**UEV**  
 EVO LI

Cotización Q-1

Joel Tavares  
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 joel.tavares@laerdal.com

Para evitar demoras en el procesamiento de su compra, por favor, incluya su numero de cotización al realizar el pedido.

Fecha: 19-11-2025

Attn: Dr. Belinda Beltran  
 +528181622386  
 beltransa25@yahoo.es

Número de cotización: Q-1219045  
 Condiciones de pago: PREPAY  
 Vigencia: 31-12-2025  
 Número de OC:

Facturar a:  
 CLUB ROTARIO MONTERREY AMISTAD  
 Avenida Constitución 2050  
 Monterrey NL 64060

Enviar a:  
 Belinda Beltran  
 Avenida Constitución 2050  
 Monterrey NL 64060

Método de Envío: ROAD  
 Condiciones de entrega: DDP

Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	SimX-Stnd	SimX 1 Headset acces Standard Bundle 1y	\$120,528.00	\$120,528.00
1	SimX-vIntro	SimX Virtual Intro 2 Hours	\$23,181.00	\$23,181.00
1	SimX-Scenario	SimX Market Place Scenario 1-year acces	\$4,018.00	\$4,018.00
1	210-84050	1 Laptop Alienware , 1 lente meta quest 3, 1 google Chromecast	\$85,000.00	\$85,000.00
<b>Total:</b>				<b>\$232,727.00</b>

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Total Productos:	\$232,727.00
Gastos de envío:	\$800.00
Otros Cargos:	
IVA:	\$37,364.32
<b>Total:</b>	<b>\$270,891.32</b>

Todos los precios están expresados en Pesos Mexicanos (MXN).

## Effective IV Access Skills Learning



### Laerdal IV Products

Skills trainers for realistic intravenous access training



#### Adult



Male Multi-Venous  
IV Training Arm Kit  
270-00001



Female Multi-Venous  
IV Training Arm Kit  
375-50001



Arterial Arm Stick Kit  
375-80001



AT Kelly Torso  
260-00001



Laerdal IV Torso  
090019

#### Pediatric / Infant



Pediatric Multi-Venous  
IV Training Arm Kit  
375-70001



Laerdal  
Intraosseous Trainer  
080015

#### Blood Pressure Training Arm

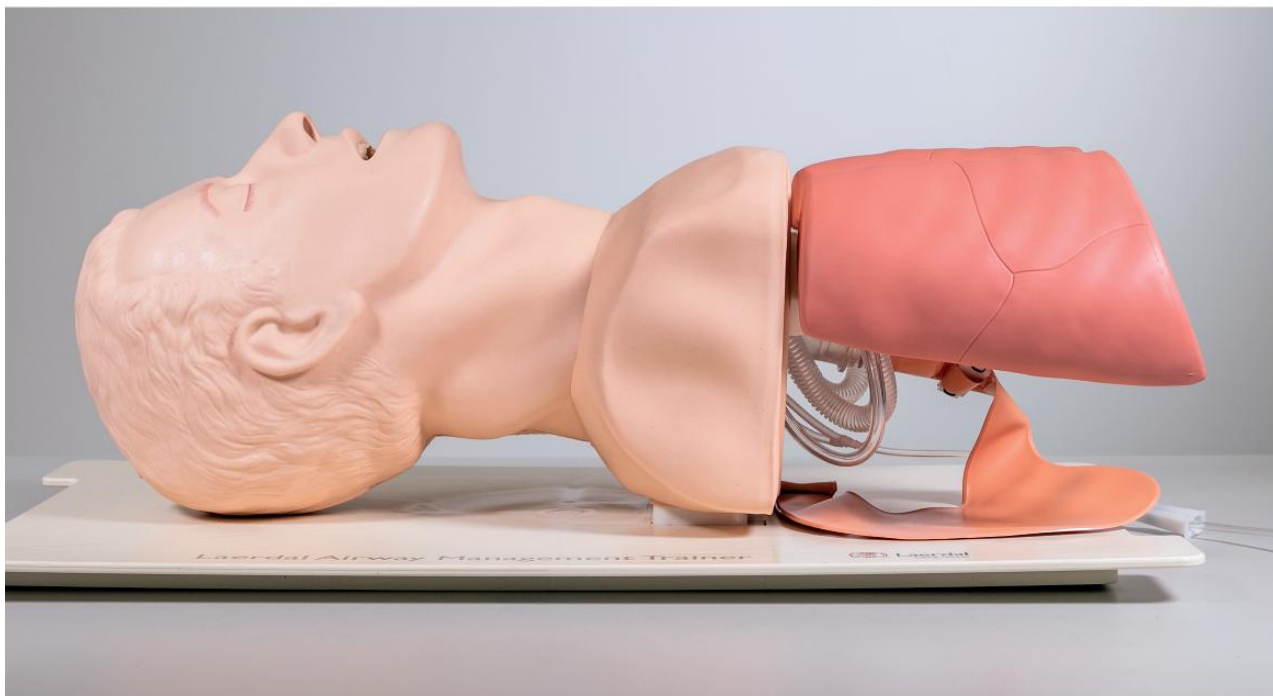
Life-like, adult arm with an electronic trainer designed for training the procedure of BP measurement.



375-40001 Blood Pressure Training Arm  
301-402 Difford Infection Pad-Adult

#### Neonatal





## Laerdal Airway Management Trainer

Realistic practice for developing proficiency in airway management skills



## Modular Skills Trainer

La solución idónea y portátil para la práctica de técnicas

Diseñado por expertos en enfermería para desarrollar competencias a través de la práctica, Modular Skills Trainer, ligero y fácil de usar, ofrece más de 16 oportunidades para que los alumnos practiquen técnicas clínicas de manera individual o en grupos.



### Práctica de técnicas clínicas para estudiantes de Enfermería

El Modular Skills Trainer se adapta a las necesidades de los programas de enfermería de hoy en día, brindando a los alumnos la oportunidad de formarse en técnicas esenciales que se espera que ejecuten en entornos clínicos reales. Equipados con una amplia variedad de accesorios en diferentes tonos de piel para representar a diversos pacientes, los alumnos pueden practicar y repetir indistintamente diferentes técnicas para desarrollar su competencia. Las configuraciones intuitivas garantizan la facilidad de uso y el almacenamiento práctico después de cada sesión de formación.

**El Modular Skills Trainer permite a los alumnos practicar más de 16 técnicas de atención al paciente, entre ellas:**

- Inserción de sonda nasogástrica
- Curación de heridas
- Cuidado de una traqueostomía
- Cambio de vendaje del catéter central
- Cuidado de una ostomía
- Cateterismo urinario y enema
- Inyecciones
- Instalación de catéter intravenoso y flebotomía
- Supositorios (rectales y vaginales)
- Cuidados perineales
- Oxigenoterapia
- Hisopado nasal
- Cuidados de una sonda gástrica

### Duradero para el uso repetido de uno o varios alumnos

Fabricado con materiales reciclados ligeros, el Modular Skills Trainer es fácil de transportar, pero lo suficientemente resistente como para soportar un uso repetido. Sus propiedades de fácil limpieza lo convierten en el dispositivo de entrenamiento ideal para la práctica a distancia o en el aula.

### Aproveche al máximo su Modular Skills Trainer

Pregunte a su representante de Laerdal sobre el modo en que la combinación del Modular Skills Trainer con otras soluciones preparará mejor a los alumnos para la práctica.



Cant.	Producto	Descripción	Precio Unitario	Precio Total
1	375-70001	Pediatric Multi-Venous IV Training Arm Kit (L) Pediatric Multi-Venous IV Training Arm Kit (L)	\$14,551.00	\$14,551.00
1	270-00001	Male Multi-Venous IV Training Arm Kit (L) Male Multi-Venous IV Training Arm Kit (L)	\$19,980.00	\$19,980.00
1	375-50001	Female Multi-Venous IV Training Arm Kit (L) Female Multi-Venous IV Training Arm Kit (L)	\$19,980.00	\$19,980.00
1	250-00250	Infant Airway Management Trainer Infant Airway Management Trainer	\$25,062.00	\$25,062.00
1	25000033	Laerdal Airway Management Trainer	\$74,958.00	\$74,958.00
1	330-15050	Modular Skills Trainer 2 Modular Skills Trainer 2	\$7,348.00	\$7,348.00
			<b>Total:</b>	<b>\$161,879.00</b>

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<b>Total Productos:</b>	<b>\$161,879.00</b>
<b>Gastos de envío:</b>	<b>\$1,000.00</b>
<b>Otros Cargos:</b>	
<b>IVA:</b>	<b>\$26,060.64</b>
<b>Total:</b>	<b>\$188,939.64</b>

XN).

# Total Project Budget

## Total Project

Quantity	Equipment	Unitary Cost	Total
1	Simulator SimMan 3G Plus	MX\$2'892,791.00	MX\$2'892,791.00
1	Labor Simulator Mama Anne	1'955,998.90	1'955,998.90
1	Laparo Analytic Simulator	1'016,706.01	1'016,706.01
2	Modular Skill Trainer	188,939.64	377,879.28
2	SIM VR Virtual Reality	270,981.32	541,962.64
Total		MX\$6'325,416.87	<b>MX\$6'785,337.83</b>

**US\$ 339,266.89 DLLS**

# Phase I Budget

Quantity		Equipment	Cost
1	Labor Simulator Mama Anne	MX\$1'955,998.90	MX\$1'955,998.90
2	Modular Skill Trainer	188,939.64	377,879.28
2	SIM VR Virtual Reality	270,981.32	541,962.64
			<b>MX\$2,875,840.82</b>

**US\$ 143,792.04 DLLS**

Phase II  
Budget

Quantity	Equipment	Cost
1	Simulator SimMan 3G Plus	<b>MX\$ 2'892,791.00</b> <b>US\$144,639.55 DLLS</b>

Phase III  
Budget

Quantity	Equipment	Cost
1	Laparo Analytic Simulator	<b>MX\$1'016,706.01</b> <b>US\$50,835.30 DLLS</b>



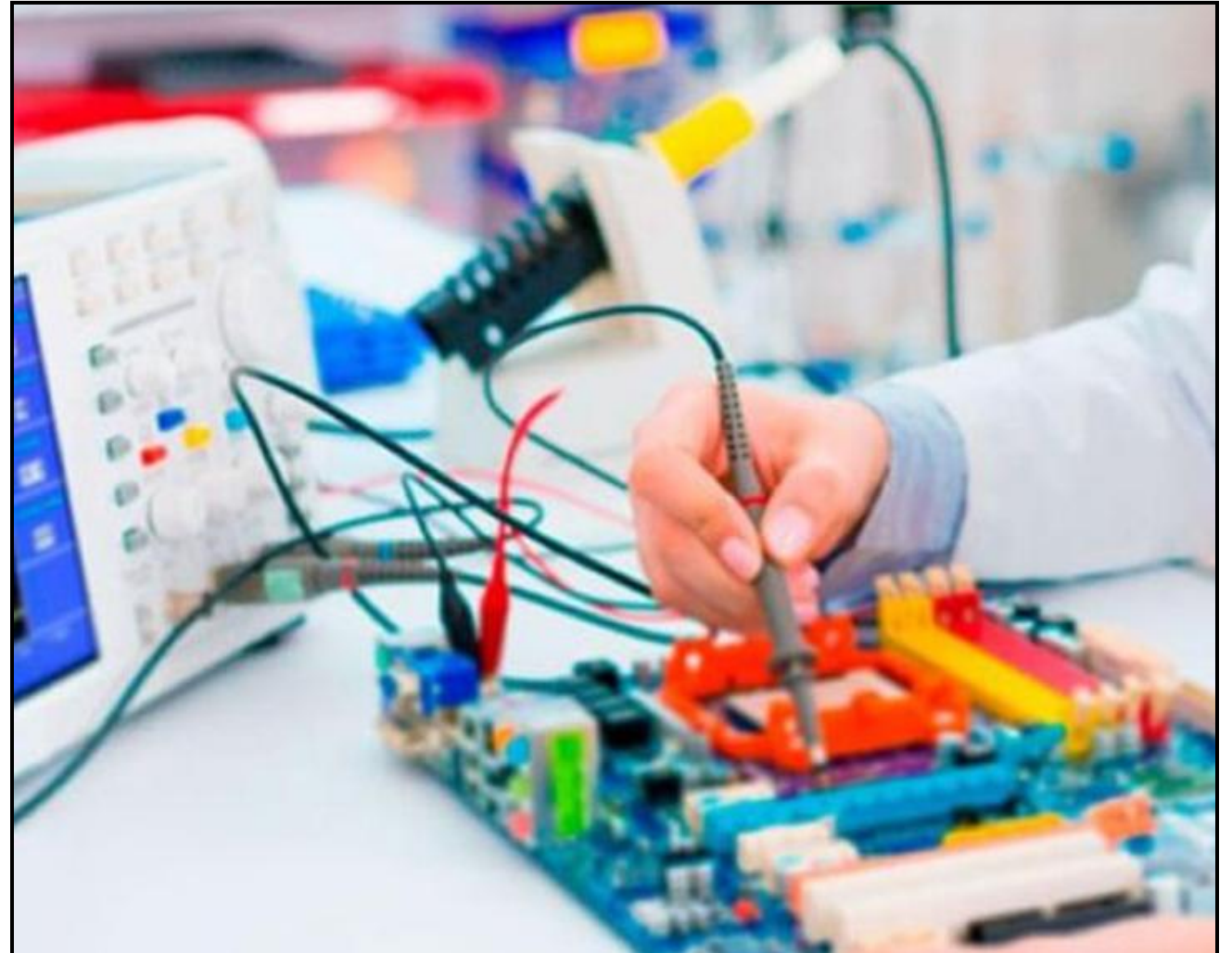






## Equipment Maintenance/ Sustainability

- Extended Warranty Insurance  
For a period of 2 years.
- The Metropolitan Hospital will be responsible for the maintenance of the equipment, as it has a specialized department for this purpose.
- The Hospital will be responsible for the acquisition of the supplies and consumables necessary for its proper operation.





# Benefits

## Improvement in the quality of education

The CHEES project raises the quality of education through international standards and the training of competent professionals.

## Institutional recognition

It contributes to accreditation and academic reputation, attracting more students and strengthening strategic alliances.

## Positive social impact

It improves community health care and reduces risks in real clinical practice with trained professionals.





## Donor Impact



### Institutional Recognition

Donors receive social and institutional recognition that strengthens their pride and sense of belonging.

### Contribution to Public Health

Donations have a direct impact on improving public health and future medical education.



### Benefits and Visibility

Options such as tax benefits, commemorative plaques and mentions at events increase the visibility of the donor.



## Conclusion and Call to Action

### Transformation in Medical Education

CHEES will create an innovative space that will improve the quality of education and health care.

### Call to Action

We invite you to join and support the project to generate meaningful change.



- Hospital Specialized Health Training Center
- Contact:
- **President** / Eduardo Reyes /+52 1 81 1974 0320
- **Foundation** /Maria Estela Imamura /+52 1 81 8253 4621
- **Elect President** / Belinda Beltran Salinas /+52 818 162 23 86
- **Foundation** / Linda Muñoz /+52 1 81 8362 3723
- **Foundation** /Mina Diaz/+52 1 81 8287 1290
- Email:beltransa25@yahoo.es
- Join the vision of the future of medicine