



Laerdal
helping save lives

Strengthening healthcare education

An overview of programs and partnerships in Nepal

Progress report January 2026



THE CHALLENGE

Developing a competent healthcare workforce to ensure high quality care

Patient safety is a global concern, but preventable errors continue to contribute to inpatient mortality and morbidity rates. Gaps in healthcare education and healthcare systems leads to a lack of competency in the workforce. Healthcare systems are challenged by a shortage of skilled providers, limited training opportunities, and the transference of knowledge and skills from education to clinical practice. There is a need to standardize competency frameworks and teaching and assessment methodologies.

Although healthcare services are accessible to about 80% of the population in Nepal, there remains a lack of quality healthcare.

THE SOLUTION

Competency-based education, simulation-based solutions

A qualified, competent healthcare workforce requires access to evidence-based practices, training and mentoring mechanisms, and supportive governance to ensure quality improvement initiatives are scalable and sustainable over time.

Comprehensive simulation-based solutions offer a safe and effective way to bridge the gap between theory and clinical practice. Simulation-based solutions help build individual and team competencies, drive quality improvement, and promote changes in culture within healthcare systems.

When baby Aaresh was born, he did not breathe. The hospital was busy and short on staff so Bedika had to manage the resuscitation alone even though she was a new midwife. “I took a deep breath and remembered what I had learned. We practiced resuscitation regularly to keep our skills sharp. I had practiced a difficult case where I had to do ventilations for two minutes —it’s quite a long time. But I remembered that it worked. So, I didn’t give up. I only stopped once I heard the sound I had been hoping for —the baby cried.”

HOW WE WORK

Strengthening the healthcare education ecosystem

At Laerdal Global Health, we collaborate with partners and institutions to develop simulation-based programs. From assessing needs through program implementation, we focus on building a supportive infrastructure and delivering value through partner-led programmatic solutions.

Our approach includes:

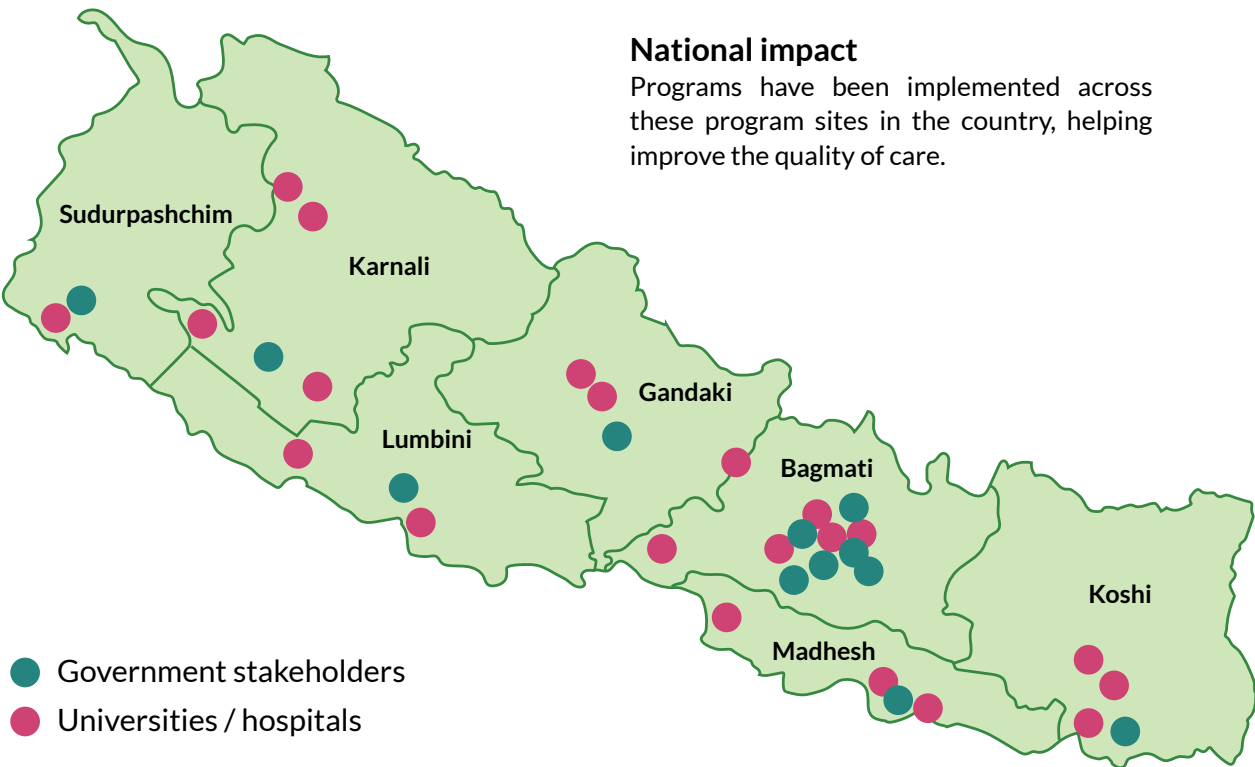
- integrating simulation-based education into curricula
- helping establish simulation labs
- facilitating competency-based education and faculty development.



Creating catalytic partnerships

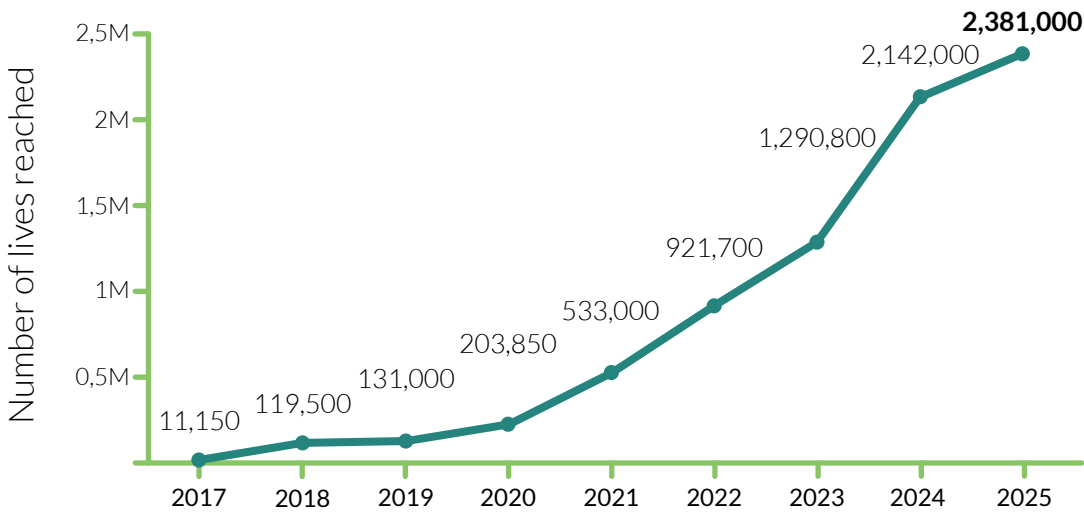
We are experienced at developing catalytic partnerships to enable effective operationalization to maximize program impact. This includes working closely with Ministries of Health to obtain buy-in and ownership, which is crucial to ensure success is scalable and sustainable over time.

- Ministry of Health and Population
- Medical Education Commission
- Family Welfare Division
- National Health Training Center
- Nursing and Social Security Division
- Curative Service Division
- Provincial Health Training Centers
- Nepal Medical Council
- Nepal Nursing Council
- BP Koirala Institute of Health Sciences.
- Chitwan Medical College
- Institute of Medicine
- Karnali Academy of Health Sciences
- Kathmandu University School of Medical Sciences
- National Academy of Medical Sciences
- Nepalese Army Institute of Health Sciences
- Nepalgunj Medical College
- Patan Academy of Health Sciences
- Pokhara University
- Purbanchal University
- Midwifery Society of Nepal
- Nepalese Society of Obstetricians and Gynecologists
- Nepalese Pediatric Society
- Pediatric Nurses Association of Nepal
- Simulation Society of Nepal
- World Health Organization Nepal
- UNFPA Nepal
- UNICEF Nepal
- Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH
- One Heart Worldwide
- Safa Sunaulo Nepal / Latter Day Saints Charities
- Terre des Hommes
- Center for Medical Simulation
- SAFER, Norway



Together with our partners, our programs have the potential to reach around one million lives in Nepal

Through our programs and partnerships, we are helping healthcare professionals to be better trained to provide quality care.



PRE-SERVICE EDUCATION

Transforming maternal and child health through simulation-based education in Nepal

The program

The first institutions for midwifery education were established in 2016 by the government of Nepal as an initiative from the Ministry of Health and Population (MoHP). Together with partners, we worked to strengthen the newly launched midwifery education in Nepal by developing competent and work-ready midwives to improve the quality of midwifery care to contribute to better maternal and newborn health outcomes.

What we did

- Integrated skills and simulation methodology into curricula
- Built the capacity of faculty on skills and simulation-based methodology
- Established high-quality simulation labs
- Included monitoring and evaluation
- Measured impact by operational research

It was found that the implementation of high-quality simulation-based education led to an increase in skills of midwifery faculty from 33% to 70% and students from 32% to 84%.

Acharya, A., et.al. (2024). Strengthening the quality of midwifery education: Experience from Nepal [Manuscript in preparation].



“Simulation-based education is the most essential methodology for developing skills and competencies. The most important component is 'debriefing'. In debriefing, the participants reflect on their experiences in the simulation, they find out the errors and suggest corrections themselves.”

Professor Dr. Kunta Devi Pun, Director, Nursing and Midwifery program, Kathmandu University School of Medical Sciences, Dhulikhel Hospital

MARCH 2018 – FEBRUARY 2021

THE IMPACT

- 320 STUDENTS TRAINED
- 173 HEALTH CARE PROFESSIONALS TRAINED
- 10,000+ LIVES POTENTIALLY REACHED ANNUALLY

OUR PARTNERS

- Department of Health Services, Ministry of Health and Population
- National Health Training Centre
- Nursing and Social Security Division
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

SITES

- Kathmandu University School of Medical Sciences/ Dhulikhel Hospital
- National Academy of Medical Sciences, Bir Hospital Nursing Campus
- Karnali Academy of Health Sciences
- Koshi Provincial Hospital
- Janakpur Provincial Hospital
- Paropakar Maternity and Women’s Hospital
- Western Regional Hospital
- Lumbini Provincial Hospital
- Karnali Provincial Hospital
- Seti Provincial Hospital



Skills assessment on active management of third stage of labor using MamaBirthie.



Skills practice on post-partum IUCD insertion using Mama-U.

PRE-SERVICE EDUCATION

Integration of Simulation for Sexual and Reproductive Health Rights Component in Pre-service Medical, Nursing and Midwifery Education

The program

Under the leadership of the Family Welfare Division, supported by the Medical Education Commission, the World Health Organization (WHO) and Laerdal Global Health scaled up Sexual and Reproductive Health Rights (SRHR) competencies to eight institutions in Nepal. In addition, the interventions have been implemented in all seven midwifery institutions in the country through similar programs and partnerships.

What we did

The program integrated SRHR competencies along with skills and simulation methodology into the curricula, established ten simulation labs, provided faculty development for simulation-based education, and supported operational research. Faculty development training and mentoring was conducted at all project sites. The findings from a three-point assessment baseline, midline and endline showed a statistically significant improvement (p < 0.001) in the mean score of knowledge, improved skills, and confidence of medical, nursing and midwifery students in SRHR components and SRHR-related skills from baseline to endline assessment.

Acharya, A., et.al. (2021) An implementation study on integration for sexual and reproductive health rights component in pre-service medical, nursing and midwifery education in Nepal. [Research report]

MAY 2021 – MARCH 2023

THE IMPACT

- 566 HEALTHCARE PERSONNEL TRAINED
- 2685 STUDENTS TRAINED
- 100,000+ LIVES POTENTIALLY REACHED ANNUALLY

OUR PARTNERS

- Ministry of Health and Population
- Medical Education Commission
- Family Welfare Division, Department of Health Services
- National Health Training Centre
- WHO Nepal

SITES

- BP Koirala Institute of Health Sciences
- Kathmandu University School of Medical Sciences
- National Academy of Medical Sciences
- Patan Academy of Health Sciences
- Institute of Medicine
- Karnali Academy of Health Sciences
- Pokhara University
- Purbanchal University

PRE-SERVICE EDUCATION

Nepal Medical Council integration of competency-based assessments into medical licensure examination

The program

To demonstrate their commitment to ensure doctors entering the healthcare workforce are competent, the Nepal Medical Council (NMC) will implement a competency-based medical licensure examination. Laerdal Global Health has entered a formal agreement with the NMC to work together to integrate the competency-based assessments while building the institutional and faculty capacity as well as developing the systems required to be able to execute effectively.

What we will do

- Develop a blueprint for execution
- Conduct situational analysis at each site
- Co-develop accreditation criteria and guidelines
- Develop teaching and assessment tools, checklists, OSCE
- Pilot test developed tools with both manual and digital recording using LIFT platform
- Train faculty and sim-lab associates
- Provide technical assistance

In coordination with participating institutions and with support from the Ministry of Health and Population (MoHP) and WHO Nepal, 26 standardized tools have been developed and tested for validity and reliability. Additionally, the first group of medical faculties has received training on competency-based teaching and assessment, specifically focusing on the NMC licensure examination.

In the upcoming phase, the program is being scaled to all 21 medical and dental institutions in Nepal.

MAY 2023 – PRESENT

THE IMPACT

- 7,500 MEDICAL STUDENTS TRAINED ANNUALLY
- 150,000+ LIVES POTENTIALLY REACHED ANNUALLY

OUR PARTNERS

- Nepal Medical Council
- WHO Nepal
- All medical institutions in Nepal

SITES

- BP Koirala Institute of Health Sciences
- Chitwan Medical College
- Patan Academy of Health Sciences
- Institute of Medicine
- Kathmandu University School of Medical Sciences
- National Academy of Medical Sciences
- Nepalese Army Institute of Health Sciences
- Nepalgunj Medical College



“We have been talking about the competency of the graduates for a long time. But the real process of assessing competency of candidates in selected essential procedures is beginning now. This will be an important milestone in medical education in Nepal.”

Prof. Dr. Bhagawan Koirala, Former Chairman, Nepal Medical Council; Chairman, Kathmandu Institute of Child Health



A newborn resuscitation scenario at a simulation corner using NeoNatalie Live.



"These simulators made it possible for nurses to improve their skills by simulating normal births, vaginal exams, and practicing for complicated birth scenarios like breech delivery, post-partum hemorrhage, and newborn resuscitation."

Malati Shrestha, Program Officer-Clinical Mentor, One Heart Worldwide, Nepal

IN-SERVICE EDUCATION

Strengthening maternal and newborn care through simulation-based education and mentoring

The program

Despite progress in newborn and maternal health, many countries, like Nepal still struggle with high maternal and neonatal mortality rates. Under the guidance of Family Welfare Division, UNICEF Nepal collaborated with Simulation Society of Nepal and Laerdal Global Health to strengthen the competencies and quality of maternal and newborn care. The program aimed to strengthen competencies and quality of maternal and newborn care through a simulation-based program. Utilizing an in-situ low-dose high-frequency approach, we implemented simulation-based capacity building and established quality improvement processes.

What we did

- Conducted needs assessments
- On-site training of clinical mentors
- Established simulation corners
- On-site and virtual low-dose high-frequency simulation trainings

To date, more than 70 simulation sessions have been conducted at the newborn resuscitation corners. 753 newborn simulation corners have been established in the country. The program is now being scaled up to Lumbini Province and Sudur Paschim Province with a comprehensive approach to quality improvement. Notable improvements in MNH indicators as well as knowledge and skills of the healthcare personnel were observed. This included sustainable changes like the establishment of a Kangaroo Mother Care Unit (KMC) unit, simulation corners, infection prevention practices, and a nursing station.

Shrestha, U., (2021) Implementation of virtual skills and simulation in maternal and newborn care during COVID -19 pandemic in the selected tertiary hospitals of Nepal. [Manuscript in preparation].

NOV 2019 TO DEC 2021

THE IMPACT

9796 HEALTHCARE
PERSONNEL TRAINED

480,000+ LIVES POTENTIALLY
REACHED ANNUALLY

OUR PARTNERS

- Family Welfare Division
- UNICEF Nepal
- Simulation Society of Nepal

SITES

- Narayani Hospital
- Janakpur Provincial Hospital
- Gajendra Narayani Singh Hospital



MATERNAL MORTALITY

151 PER 100,000 LIVE BIRTHS



NEWBORN MORTALITY

21 PER 1,000 LIVE BIRTHS



ACCESS

80% OF BIRTHS ARE ASSISTED
BY A SKILLED HEALTH
PROVIDER

From a report on Maternal Mortality.
National Population and Housing Census
2021

IN-SERVICE EDUCATION

Supporting One Heart Worldwide to implement quality improvement initiatives

Simulation Based Mentorship Program in Maternal and Newborn Care

Together with the Government of Nepal and led by One Heart Worldwide, the Simulation-Based Mentorship Program (SBMP) was initiated to focus on the most remote, rural districts in Nepal. The program aims to upgrade the clinical skills and knowledge of health facility nurses by training them as Skilled Birth Attendants and transforming them into clinical mentors, with onsite coaching and mentoring. Laerdal Global Health provided technical guidance in integrating a simulation based approach, conducting simulation facilitator courses, setting up simulation corners, and implementing on-site low-dose high-frequency training sessions.

Maternal and Newborn Health Simulation Lab Centers of Excellence in Nepal

Laerdal Global Health is supporting One Heart Worldwide establish seven Maternal Newborn Health Centers of Excellence across tertiary hospitals in five provinces of Nepal. The simulation-based methodology is currently being integrated into the National Health Training Center's curriculum, which will be taught at the Centers of Excellence.



JUNE 2020 TILL PRESENT

THE IMPACT

5206 HEALTHCARE
PERSONNEL TRAINED

70,000+ BIRTHS POTENTIALLY
REACHED ANNUALLY

OUR PARTNERS

- One Heart Worldwide
- Government of Nepal

SITES

- Koshi province
- Madhesh province
- Bagmati province
- Gandaki province
- Karnali province
- Paropakar Maternity Women's Hospital

A physiological birth scenario at a simulation lab using MamaBirthie.

Strengthening Competency and Quality Improvement in Maternal and Newborn Care

Under the leadership of Family Welfare Division, UNICEF Nepal is collaborating with Laerdal Global Health and Simulation Society of Nepal to strengthen the competencies and quality improvement processes in MNH care at different levels of health facilities (provincial hospitals to district hospitals to birthing centres). We aim to enhance cost-effective simulation-based capacity building through low-dose high frequency simulation sessions, setting up simulation labs/ corners, strengthening linkages for technical support with professional network/ mentors and health facilities. We would focus mainly on improvement of quality improvement processes and engage communities and health care professionals using a human-centered design (HCD approach).

JUNE 2024 – DECEMBER 2027

THE IMPACT

22,000 LIVES POTENTIALLY REACHED ANNUALLY

OUR PARTNERS

- Family Welfare Division
- UNICEF Nepal
- Simulation Society of Nepal
- Provincial Health Training Centre from province 5 and 7
- Nepalese Society of Obstetricians and Gynecologists
- Nepal Pediatric Society
- Pediatric Nurses Association
- Midwifery Society of Nepal

SITES

Lumbini province

- Lumbini Provincial Hospital
- Kapilvastu Hospital
- Arghakhachi Hospital
- Dhakawang Health Post
- Shivaraj Hospital

Sudurpaschim province

- Seti Provincial Hospital
- Baitadi Hospital
- Mahakali Hospital
- Udayadev Health post
- Dodhara Chandani Hospital

FEATURED PRODUCTS

Laerdal’s simulators, skills trainers, and clinical tools have contributed to the success of the simulation-based programs





IN-SERVICE EDUCATION

Strengthening quality of midwifery care through simulation-based education

This initiative improves access to hands-on simulation-based training for maternal and newborn care service providers under the leadership of Family Welfare Division, Ministry of Health and Population. This project is funded by Norway, supported by UNFPA, and implemented by MIDSON in partnership with Laerdal Global Health. The project will strengthen the competencies of doctors, nurses, and midwives in the selected health facilities in the provinces of Madhesh and Sudurpaschim, ultimately improving the quality of care for mothers and newborns.

By integrating on-site low-dose high-frequency training at four health facilities, the aim is to empower health care professionals with the skills they need to help save lives on the day of birth. With maternal mortality still a critical issue in Nepal, this initiative represents a vital step towards safer childbirth and better health outcomes.

To date, 13 mentor doctors, nurses, and midwives have been trained on simulation-based education using the SimBegin program and preparations are underway to implement low-dose high frequency skills and simulation sessions. More than 50 health care providers working in the maternal and newborn care units have been trained through 31 low-dose high frequency sessions.

Young Hong, Representative for UNFPA in Nepal says: "While Nepal has made significant improvements in the sexual and reproductive health sector, the 2021 Maternal Mortality Report highlights that most maternal deaths in Nepal are preventable, with 57% occurring in health facilities due to delays in care, 26% at home, and 17% during transit or referrals. These findings underscore the urgent need to build the capacity of healthcare professionals through continuous, hands-on, high-quality training. By implementing simulation-based education and low-dose, high-frequency skills training, this collaboration aims to strengthen the quality of care and reduce preventable maternal deaths. We are confident this initiative will serve as a positive example of how innovative, practical training can transform clinical practices and improve outcomes for mothers and newborns across Nepal."

SEPTEMBER 2024 TILL
PRESENT

THE IMPACT

50+ HEALTHCARE PERSONNEL
TO BE TRAINED

4,600+ LIVES POTENTIALLY
REACHED ANNUALLY

OUR PARTNERS

- Family Welfare Division,
Ministry of Health and
Population
- UNFPA
- MIDSON

SITES

Madhesh province

- Gaur Provincial Hospital
- Kaudena Community
Hospital

Sudurpaschim province

- Bajhang District Hospital
- Kolti Basic Hospital

IN-SERVICE EDUCATION

Strengthening Basic Emergency Care Training through Emergency Care Learning Lab

During the second pilot testing of Basic Emergency Care course in Nepal 24-28 March 2025 conducted under the leadership of National Health Training Centre, Health Emergency Operations Center with support from WHO, Emergency Care Learning Lab was used to train the BEC skills and received very positive response from the trainers and participants in terms of hands-on experience, skills transfer and training outcomes. The Eeme



OTHER PROGRAMS AND PARTNERSHIPS

Scaling up simulation- based training with partners, professional associations, and government stakeholders

In collaboration with several partners in Nepal, simulation-based training programs have been implemented. The introductory simulation-based education program, SimBegin, builds capacity of faculty on facilitating simulation methodology. Other well-established programs like Essential Newborn Care, and Basic Life Support/Advanced Cardiac Life Support have been conducted to prepare healthcare personnel to manage maternal and neonatal health emergencies like post-partum hemorrhage and birth asphyxia.

2017 TO PRESENT

THE IMPACT

7,000+ HEALTHCARE PERSONNEL
TRAINED

OUR PARTNERS

- National Academy of Medical Sciences
- Midwifery Society of Nepal
- Nick Simons Institute
- MIDSON
- Safa Sunaulo Nepal / Latter Day Saint Charities
- Terre des Hommes Nepal
- Centre for Medical Simulation
- SAFER, Norway



Pramila had a normal delivery, but when her baby boy was born, he was not crying and blue. Within the first minute, he was rushed to the resuscitation corner where he received bag-mask ventilations that midwife Rashmita had practiced regularly as part of the her simultion-based training. “After that, I felt relieved. I took a long breath. That was a proud moment for me because of my education based on simulation and skills learned in the lab, it made me confident to save a life by tackling an emergency situation quickly and efficiently.”

Laerdal Global Health is a not-for-profit company committed to strengthening health systems in countries with the highest mortality. Together with partners, we develop high-impact, scalable solutions that enable healthcare workers to deliver lifesaving care. We focus on reducing preventable deaths from childbirth complications and other time-critical emergencies.

Our goal is helping save one million more lives every year by 2030



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