ANAESTHESIA UNDER FIRE:

Maintaining and Strengthening Services in Ukraine and Beyond

WHEN WARS ERUPT OR PANDEMIC
HITS, LIFEBOX, THE GLOBAL
NONPROFIT WORKING TO MAKE
SURGERY AND ANAESTHESIA SAFER,
STANDS WITH OUR PARTNERS AND
HEALTHCARE PROVIDERS. THIS IS
BECAUSE, IN THOSE MOMENTS,
WHEN THE POWER CUTS OUT,
WARDS OVERFLOW, AND RESOURCES
VANISH, THE ONLY THING
STANDING BETWEEN A PATIENT AND
LIFESAVING CARE IS A HEALTHCARE
WORKER DETERMINED TO DO THEIR
JOB AND THE TOOLS THEY HAVE
IN THEIR HANDS.

rom the bombed-out hospitals in Ukraine to the remote operating rooms in the Democratic Republic of Congo and the overwhelmed COVID-19 wards in different low-resource settings, Lifebox has equipped frontline providers with the lifesaving tools and training they need to monitor oxygen levels, illuminate surgeries, prevent infection, and keep patients safe even when everything else is falling apart.

When the missiles struck Ukraine in February 2022, hospitals were damaged or destroyed; surgical teams were forced to work in bunkers and makeshift operating rooms, managing wounded patients amidst severe shortages of supplies and staff. Lifebox reached out to the Ukrainian Society of Anaesthesiology, whom we had worked with previously on access to pulse oximeters in Ukraine, to see if they needed support and they immediately responded with requests.

Lviv Emergency Hospital is one of the hospitals that experienced casualties flooding the hospital following the missile strikes that hit Lviv in March 2022.

"It was a mass casualty event. We had to recall the doctors back from their homes in the wee hours of the morning. We opened 20 operating rooms at once," recalls Professor Nataliya Matolinets, Medical Director of Anesthesiology and Intensive Care at Lviv Emergency Hospital. "Many casualties lost limbs. It was heartbreaking to break that news to them."

Throughout it all, anesthesiologists across Ukraine continued their work, sometimes from underground bunkers. For 40 days straight, many of them lived inside the hospital, working 24 hours a day to ensure continuous, lifesaving care as missiles continued to fall.

Working with the support of Blue Check Ukraine, a non-profit founded by actor Liev Schreiber and colleagues to assist local NGOs in Ukraine, Lifebox set out to support Lviv and other hospitals with essential anaesthesia equipment, as well as pulse oximeters, and surgical headlights.

"Lifebox gave us the equipment we needed to monitor and keep patients safe," says Professor Matolinets. "These essential tools made a critical difference when we needed them the most." Throughout it all, anesthesiologists across Ukraine continued their work, sometimes from underground bunkers. For 40 days straight, many of them lived inside the hospital, working 24 hours a day to ensure continuous, lifesaving care as missiles continued to fall.

More than three years since the war began, Lviv Emergency Hospital has conducted thousands of surgeries, transforming itself into a hub of complex trauma, reconstructive, and rehabilitation care. The hospital now boasts the largest prosthetics factory in the country and performs advanced osseointegration surgeries. Its intensive care capacity has grown from 50 to more than 300 beds.

Lifebox's impact in Ukraine is part of how we work with partners experiencing humanitarian crises.

In the Democratic Republic of Congo, Lifebox has worked with Second Chance and the International Committee of the Red Cross (ICRC) to provide training and equipment to improve surgical safety.

When COVID-19 pandemic struck, essential tools like pulse oximeters and personal protective equipment (PPE) were limited. For surgical and anesthesia providers, the crisis was twofold: managing a deadly respiratory virus while continuing to deliver lifesaving care in under-resourced operating rooms.

In collaboration with partners like Smile Train, ELMA Philanthropies, and the UBS Optimus Foundation, and the World Federation of Societies of Anaesthesiologists (WFSA), Lifebox provided critical equipment and training to protect patients and providers. Lifebox ANZ hugely supported Lifebox's COVID-19 response across the Pacific. As a result, 8,800 pulse oximeters were distributed across 53 countries to help detect and manage "silent hypoxia" - a dangerous drop in oxygen levels common in COVID-19 patients - and enable timely intervention.

Lifebox's lifesaving tools and training

During such crises, Lifebox pulse oximeters become lifelines, allowing providers to maintain a standard of care that would have otherwise been impossible under missile strikes, displacement, pandemics, and resource collapse. As patients stream in with injuries and severe blood loss, these devices are crucial for rapidly triaging and continuously monitoring oxygen levels, helping surgical teams prioritize the most critical patients and respond swiftly.

Frequent power cuts left operating rooms in darkness. Lifebox's surgical headlights provide a reliable, hands-free light source, allowing surgeons and anesthesiologists to continue lifesaving procedures without relying on overhead lighting.

Tools alone are insufficient to ensure surgical teams globally provide lifesaving care. Lifebox complements equipment with robust, evidence-based training that empowers providers to deliver safer care

even under pressure. This includes onthe-job specialized training in teamwork strengthening and infection prevention and specialized clinical workshops in pulse oximetry, capnography, and safe operating room practices. These training modules form the foundation of Lifebox's framework for strengthening surgical systems.

"At Lifebox, we are committed to delivering not just tools and training to improve anaesthesia and surgical safety in low resource settings but also standing with surgical teams working on the frontlines of humanitarian crises," said A/Prof Suzi Nou, Lifebox ANZ Chair. "But we can't do it alone. Sustaining and scaling these lifesaving initiatives requires all of us. We invite organizations and individuals to join us as we make surgery safer amid crisis, in recovery, and beyond."

The ASA is a proud supporter of Lifebox. To make a tax deductible donation and support the work of Lifebox in the region, please visit: https://www.anzca.edu.au/safety-and-advocacy/global-health/lifebox-australia-and-new-zealand

Lourdes Walusala

Media Relations Manager, Lifebox