

Report Dutch Operation Hernia Mission 2025

We are pleased to report that the 14th Dutch Operation Hernia mission took place in December 2025. A team of six surgeons (Eddy Hendriks, Nanette van Geloven, Anne Ottenhof, Frank Garssen, Djamila Boerma, and Maarten Simons) and six surgical residents (Reinier de Vries, Anouk Latenstein, Niels Wolfhagen, Kelly Dreuning, Lucas Goense and Alicia Borggreve) spent ten days in Ghana for Operation Hernia. The team was joined by an obstetrician–gynecology resident (Noor Simons) who provided obstetric education and training to midwives and medical officers at the local hospitals. During the mission, 128 surgical procedures were performed on 119 patients.

The goal of Operation Hernia is to provide high-quality, low-cost hernia surgery and training to underserved populations in low-income countries like Ghana. Inguinal hernia is a common surgical condition, with an estimated 220 million cases worldwide. Population-based studies from sub-Saharan Africa report a prevalence among men ranging from 7% to 13%. Despite the high demand for hernia surgery in Africa, the number of procedures performed remains low. This limited access to surgical care results in significant morbidity and mortality, as well as negative economic consequences. In Ghana alone, it is estimated that more than one million inguinal hernias require surgical repair. Through its annual missions, Operation Hernia aims to reduce the burden of inguinal hernias and help patients return to work and daily life.



Team of the 14th Dutch Operation Hernia Mission

The first weekend of the 2025 mission was dedicated to travel. We flew from Amsterdam to Accra and then continued by car to our respective hospitals (Axim and Dixcove). Thanks to Fred, the ambulance driver from Axim Hospital, both teams with all their supplies safely reached the destinations. During the nine-hour journey, we gained our first impressions of Ghana. We stopped along the way to visit Fort Elmina with a local guide, a historic site closely linked to the transatlantic slave trade. This visit was a powerful reminder of a dark chapter in history, in which the Dutch played a significant role.

Axim

Doctors Hendriks, van Geloven, Simons, de Vries, Latenstein, Wolfhagen and Simons were stationed at Axim Hospital. The Axim hospital is a medium-sized government district hospital and its facilities naturally differ from those in Dutch hospitals, but everything was in place to provide high quality hernia surgery.



The local team, consisting of Dr. Adu-Gyamfi (gynecologist), Dr. Theodore Sutherland and Dr. Lisa Sutherland (medical officers), Abbygale (principal operating room nurse), Stephen (head of anesthesia), warmly welcomed us on Monday morning. Some members of the staff recognized Dr. van Geloven from the previous mission. The staff, including scrub nurses and anesthetists, were highly motivated by their earlier positive experience and proved to be hardworking and involved.



To get started efficiently, we split into teams. Two of us went directly to the ward to screen patients, while the other two went to the operating theatre to prepare and unpack all surgical supplies we brought with us and which had been generously donated by our sponsors. A large number of patients had already been pre-screened by the local hospital staff, and the hernias were well diagnosed. Several differences stood out when compared to the Dutch patient population we are accustomed to. Most patients presented with large, debilitating hernias as a result of limited access to healthcare and the inability to receive surgical treatment at an earlier stage. In contrast, in the Netherlands, patients are typically operated on when the hernia is still small and gives minor complaints. Screening by the local team proved effective, we declined some patients with significant obesity and umbilical or epigastric [non inguinal] hernias due to the increased risk of recurrence and infection.

The operating theatre complex consisted of two operating rooms, both equipped with air conditioning, although temperatures could still rise to 28°C during hot tropical days. Regular power outages occurred but were promptly resolved using the hospital's generator, ensuring continuity of care. Some technical difficulties were encountered with the diathermy cables; fortunately, we had brought spare equipment, which prevented any disruption to the surgical program.

One striking difference compared to Dutch operating theatres was the highly efficient and respectful use of available materials. In Ghana, virtually nothing is discarded unnecessarily. Many items that are disposable in the Netherlands (such as surgical drapes, sterile gowns, diathermia pencils etc.) are more durable to be cleaned and re-sterilized. As a result, the amount of waste generated after a surgical procedure is remarkably small compared to that of the same operation in the Netherlands. There is much to learn from the Ghanaian system when it comes to sustainability, both in terms of environmental impact and the careful use of resources in an era of rising healthcare costs.



Autoclaves at the hospital in Axim

As the week progressed, teamwork improved steadily and a clear routine was established. Working in different teams, a total of 60 surgical procedures were performed on 57 patients. The vast majority involved Lichtenstein procedures for inguinal or inguinoscrotal hernias, in addition to one umbilical hernia repair and seven hydrocele procedures. Our team also assisted the local medical officers with several emergency cases, including an incarcerated inguinal hernia, an acute appendectomy, a case of priapism due to sickle cell crisis, a bleeding ectopic pregnancy, and cesarean sections. It was remarkable to see how confidently Ghanaian children entered the operating theatre without their parents and bravely underwent their procedures.

All pediatric patients received general anesthesia. Most adult patients were operated on under local anesthesia, while more complex cases, such as recurrent, bilateral, or non-reducible hernias, were performed under spinal anesthesia. No early complications were encountered. Long-term follow-up is ensured by the medical officers at Axim Hospital. We will remain in close contact with them regarding any cases in which complications may occur and will provide advice or additional support if needed.

Dr. Theodore Sutherland, one of the local medical officers, showed great enthusiasm for learning hernia surgery. He already had prior surgical experience, which was clearly reflected in his technical skills. Despite his demanding clinical responsibilities, he was able to participate in the operating sessions on multiple occasions and performed seven procedures together with one of our team members. He proved to be highly talented and a quick learner, rapidly mastering the new techniques. Dr. Simons also brought an anatomical training model, which was used for hands-on practice, complemented by instructional videos and anatomical teaching materials.



Dr. Simons and Dr. Sutherland during hernia surgery



The anatomical training model for inguinal hernia surgery

Our obstetrician–gynecology resident joined the obstetrics ward rounds on a daily basis. She actively participated in deliveries and cesarean sections and provided both theoretical education and practical training using simulation models. In addition, she delivered obstetric ultrasound training to the medical officers in efforts to improve local obstetric care.



Simulation training in acute obstetric care



Obstetric ultrasound training

On Tuesday, we had a spare hour to explore Axim just before sunset. In the town, a local Christmas celebration was taking place, where Christmas trees were decorated against a tropical backdrop of palm trees, while children danced to popular Christmas songs. It was an unexpected and striking sight—something we usually associate with cold winter weather, now experienced in a warm tropical setting.



Christmas celebration in Axim

On our last evening in Axim, we organized a celebratory dinner to express our gratitude to the entire hospital staff for their dedication and hard work. Dr. Simons surprised everyone with a magic show, creating a joyful and relaxed atmosphere. We celebrated the large number of patients treated, the strong teamwork that had developed throughout the week, and expressed our appreciation by presenting small gifts to the local team.

Dixcove

The six other members of the mission — Boerma, Garssen, Ottenhof, Dreuning, Goense, and Borggreve — were stationed in Dixcove, a coastal fishing community in the Western Region of Ghana. The Dixcove Government District Hospital, officially known as Nana Hima Dekyi Hospital, was established in 1972 and remains the only public hospital serving the Ahanta West District, which had an estimated population of approximately 153,000 inhabitants in 2021. Access to the hospital requires traveling along what one local doctor described as “*one of the worst roads in Ghana.*” Nevertheless, this did not discourage more than 60 patients suffering from inguinal hernias from seeking surgical care at the hospital.



Dixcove Government Hospital

Upon our arrival at the hotel in Dixcove on Sunday evening, we received a warm welcome from Dr. Nana Brobbey and other representatives of the hospital staff. It was clear that the local team had extensive experience with organizing and supporting hernia missions. The preparation was excellent: all patients had already been screened by the local doctors, and those scheduled for surgery on the first day were present at the hospital. This efficient organization allowed us to review cases immediately and begin operating the following morning without delay, ensuring optimal use of our limited time in Dixcove. The hospital provided two operating theatres for the mission, both of which were in continuous use for hernia surgery from 8:00 a.m. until 7:00 p.m. each day. With our team of six, we were able to efficiently balance operating with patient screening for subsequent days, postoperative follow-up, administrative duties, and short breaks for coffee and lunch.



First day of surgery with the team at Dixcove

From the very first day, the atmosphere and communication with the local staff was exceptional. The operating theatres were filled with positive energy — laughter, music, and even spontaneous dancing. Nurse Benedicta ensured that there was never a moment of idle time in the operating room: patients were called in consecutively, and all patient files and hospital registry documentation were meticulously maintained. Although she is normally based at the hospital in Takoradi (approximately two hours from Dixcove), she made a remarkable effort to support the mission, even while being 37 weeks pregnant and bringing her four-year-old daughter with her to Dixcove. The scrub nurses — i.e. Doris, Belinda, Kombat, Mary, Nancy, and Josephine — demonstrated impressive progress in mastering the routine steps of hernia surgery, which allowed us to work increasingly smoothly together as the week progressed. As well as our colleagues experienced in Axim, we were deeply impressed by the respectful and resourceful reuse of available materials. The team demonstrated a remarkable efficiency in using minimal resources to help as many patients as possible, as well as minimizing the environmental impact of surgical care. Our local anesthesiologists — Sandra, Bismark, and Enock — ensured excellent care for all our patients, including the 17 pediatric patients treated during the mission using ketamine anesthesia and provided reliable spinal anesthesia for patients with bilateral or large inguinoscrotal hernias. Lastly, we were particularly impressed by the dedication and motivation of the team of local medical doctors — Dr. Brobbey, Dr. Alakwa and Dr. Sowa — who provide round-the-clock care to a wide range of patients, including children, obstetric cases and surgical emergencies, often under challenging circumstances.

We would like to sincerely thank all staff members for their outstanding collaboration. As already mentioned during our speech at the celebratory evening, the enthusiasm with which Ghanaians laugh, connect, and support one another in their work is truly inspirational.



Dixcove teamwork

Looking back, we reflect on a highly productive and educational period in Ghana. In total, we were able to treat 119 patients and significantly improve their quality of life. Freed from the limitations caused by inguinal hernias, many patients were able to resume their physically demanding work as early as the first week after surgery.

For the surgical residents, this mission provided a unique and invaluable learning experience within a different healthcare system. They not only played a hands-on role in the surgical care delivered during the mission but also had the privilege of learning and refining hernia surgery techniques under the guidance of passionate and highly experienced surgeons, often dealing with more complex cases than are typically encountered in the Netherlands.

To conclude our work in the operating theatres, the teams from Axim and Dixcove reunited for a few last days at Bojo Beach, enjoying the Ghanaian hospitality, coastline, local beers and cuisine. Fortunately, we had ample opportunity to catch up during our 11.5-hour journey from Axim, via Dixcove, to Bojo Beach — a distance of only 280 kilometers, but an experience in itself.



Two of our patients, ready to go home the morning after surgery (picture taken with consent)

Last but not least, we would like to express our gratitude to our sponsors who made this mission possible: Dokter Izak Wessel Stichting, Medtronic, OLVG, Tergooi MC, Flevoziekenhuis, Jan van Goyen Clinic and St. Antonius Ziekenhuis. Special thanks go to Chris Opong and his team at Operation Hernia. Without their dedication, coordination, and continued commitment, these missions would simply not be possible.