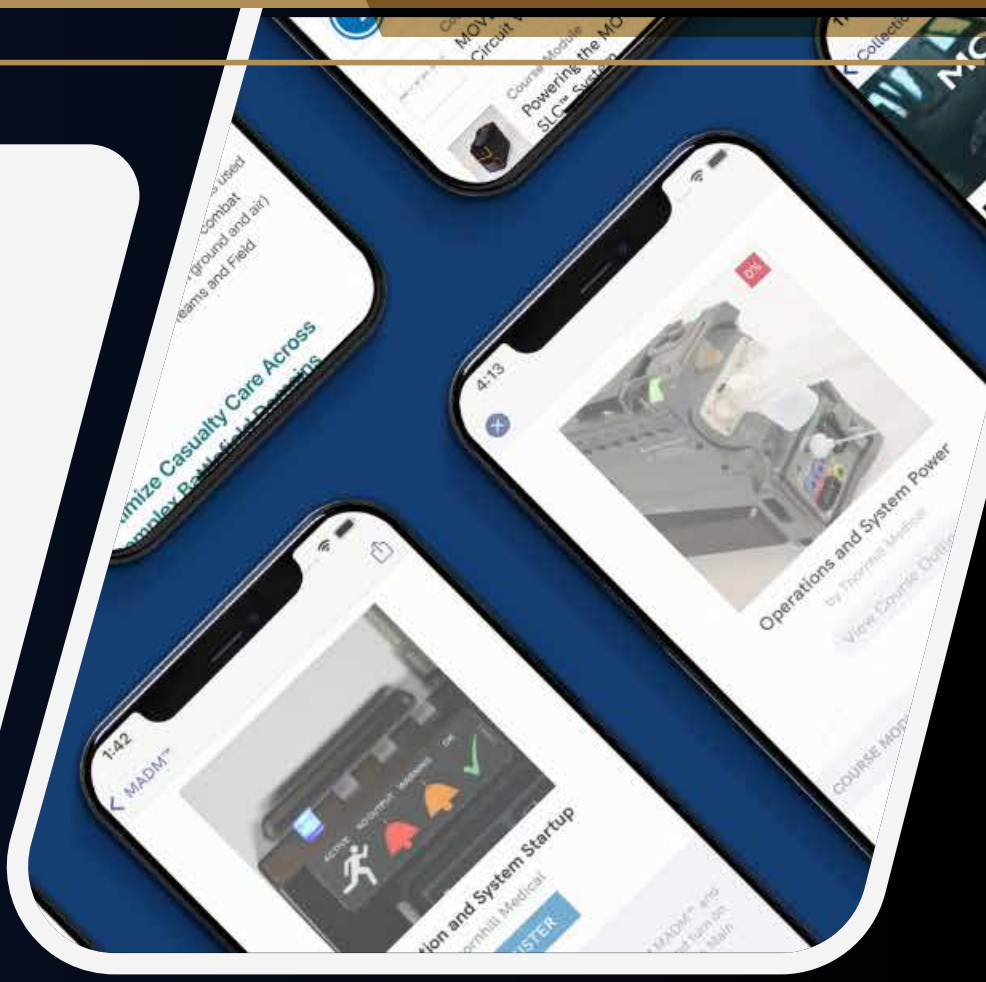
CASE STUDIES

SCALING LIFE-SAVING EXPERTISE IN THE WORLD'S MOST CHALLENGING ENVIRONMENTS



THE COMPANY

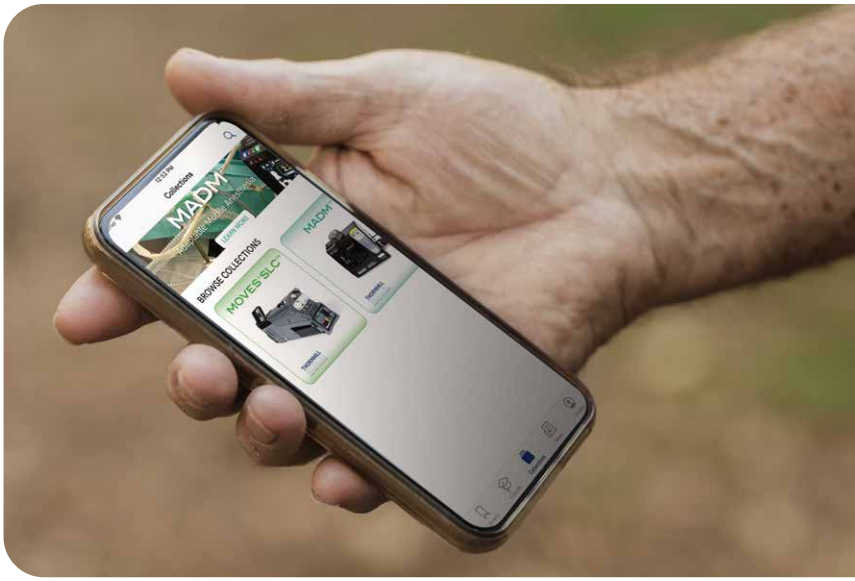
Founded in 2004 as a spinoff from Toronto's University Health Network, Thornhill Medical has established itself as one of the fastest-growing medical device companies serving military and emergency medical teams worldwide. With over 40 patents awarded or pending, the company is internationally recognized as a leader in the precise control and management of arterial blood gases.

Thornhill Medical's flagship products, the MOVES® SLC™ (Mobile Oxygen Ventilator and Suction System) integrated life support system and the MADM™ portable anesthesia delivery device, represent breakthrough innovations in combat casualty care. These ruggedized, battery-operated systems consolidate multiple critical care capabilities into compact, portable units specifically designed for austere and extreme environments.

In January 2024, the company secured a landmark $356 million contract with the U.S. Department of Defense through the Defense Logistics Agency, making these technologies available across all branches of the U.S. military. The systems have been deployed in over 19 countries and are currently being used in combat operations, disaster relief scenarios, and forward surgical teams around the world.

THE CHALLENGE

When Russia invaded Ukraine in February 2022, Ukrainian military and civilian medical personnel faced unprecedented challenges treating mass casualties in large-scale combat operations. The conflict has been complicated by prolonged evacuation distances, contested airspace, and the need to provide extended critical care far forward on the battlefield.



Medical teams needed immediate access to life-support technology that could function in these extreme conditions. But technology alone wasn't enough. Medical personnel required rapid, comprehensive training on unfamiliar equipment to deploy it effectively under fire.

Traditional training approaches were impossible. There was no time for multi-day courses. No opportunity for repeated hands-on practice sessions. And critically, medical teams operating in forward areas and during evacuation operations often have zero connectivity, making cloud-based training resources completely inaccessible precisely when they are needed most.

The requirement was clear: Thornhill Medical needed a way to rapidly distribute comprehensive training materials that would be accessible to medical personnel anywhere, anytime—including in the most austere combat conditions without any network connectivity.

THE SOLUTION

Thornhill Medical partnered with Allogy to develop the MOVES SLC & MADM Training application, built on Allogy's Capillary platform—the same technology powering Deployed Medicine, the Defense Health Agency's app with over 300,000 users worldwide.

THE CAPILLARY-POWERED MOBILE APP PROVIDES:

Offline Functionality

The app's offline-first architecture ensures medical personnel can access critical training content and operational guidance without any network connectivity—essential for combat medics operating in forward positions, during air and ground evacuations, and in field hospitals where connectivity is unreliable or nonexistent.

Just-in-Time Performance Support

Rather than requiring personnel to recall training from memory under stress, the app puts step-by-step setup procedures, troubleshooting guides, and operational protocols directly at the point of need, exactly when providers need them most.

Rapid Deployment and Updates

The Capillary platform allowed Thornhill Medical to push updated content and training materials in real-time to users who had connectivity, with those updates syncing to learner devices for offline access This proved critical as operational lessons emerged from field use.

Intuitive Navigation Under Pressure

The app's design prioritizes rapid access to critical information. Medical providers can quickly locate specific procedures, technical specifications, and troubleshooting guidance even in high-stress situations.

THE DEPLOYMENT: UKRAINE 2022-PRESENT

Beginning in **May 2022**, Thornhill Medical began deploying **MOVES® SLC™ and MADM™** systems to Ukraine...

...through partnerships with the **Canadian government, Maple Hope Foundation, and the Canada-Ukraine Foundation.**

To date, **over 200 units** have been delivered to both military and civilian medical teams.

Ukrainian medical personnel nicknamed the MOVES® SLC™ "the medical Javelin" - a testament to its battlefield impact. The systems have been used extensively:

- On ambulances and medical evacuation trains transporting critically wounded.
- In forward surgical positions providing combat casualty care.
- During air and ground medical evacuation operations.
- In civilian hospitals treating injured soldiers and civilians.
- For CT scans and other diagnostic procedures requiring life support.

The mobile training app played a crucial role in this rapid deployment. Thornhill Medical provided in-person training to initial cohorts of Ukrainian surgeons, anesthesiologists, nurses, and combat medics. The Capillary app then enabled these medical professionals to:

- **Reference procedures during setup and operation** without relying on memory.
- **Train additional personnel** by using the app as a teaching tool.
- **Troubleshoot issues** in the field without access to technical support.
- **Maintain proficiency** through regular access to training content.

According to Ukrainian military medical leadership, medical teams put MOVES® SLC™ systems into operational use within hours of receiving training, with the mobile app providing continuous performance support.

IMPACT: SAVING LIVES WHERE IT MATTERS MOST

OPERATIONAL READINESS

Medical personnel could begin using sophisticated life-support technology within hours rather than weeks, dramatically reducing time-to-competency.

SCALED EXPERTISE

The mobile app enabled rapid knowledge transfer across hundreds of medical personnel (from combat medics to anesthesiologists) without requiring centralized training facilities or instructor

SUSTAINED PERFORMANCE

Offline access to training content meant medical providers could refresh their knowledge and verify procedures even in the most challenging operational environments.

ADMINISTRATIVE BURDEN REDUCTION

Thornhill Medical could update training content centrally and push updates to the field, eliminating the need to redistribute physical training materials or conduct repeated in-person sessions.

BEYOND UKRAINE: GLOBAL MILITARY MEDICINE

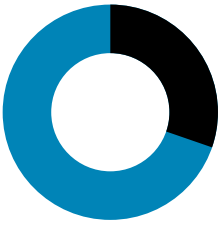
The success in Ukraine validated what Thornhill Medical and Allogy recognized from the beginning: the future of military medicine requires technology that works in the most challenging environments, paired with training that's accessible at the point of need.

U.S. Military Adoption

- MOVES® SLC™ certified for fleet-wide U.S. Army Airworthiness Release
- Deployed as part of the first En-Route Care System aboard US Navy's Eisenhower Strike Group
- Added to USMC AMAL 647 for En Route Care
- Featured in the U.S. Army Medical Modernization Strategy as exemplifying next-generation critical care capability

Operational Impact

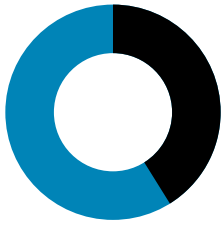
The MOVES® SLC™ addresses critical requirements for prolonged field care and extended evacuation times expected in peer-contested domains:



70%

REDUCTION

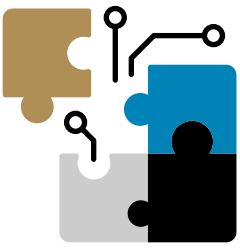
in total equipment cube and weight compared to separate portable systems



60%

REDUCTION

in oxygen requirements by eliminating heavy, dangerous compressed oxygen cylinders



All-in-one integration

consolidates vital signs monitoring, oxygen generation, ventilation, and suction into a single

16kg unit

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THE ALLOGY DIFFERENCE

This deployment showcases the core value proposition that Allogy brings to essential services organizations:

SCALING EXPERTISE IN CRITICAL MOMENTS

The Capillary platform enabled Thornhill Medical to distribute expert-level training rapidly across geographically distributed teams operating under extreme conditions—exactly when that knowledge could save lives.

REDUCING TIME FROM TRAINING TO COMPETENCY

By providing just-in-time performance support rather than relying solely on recall, the mobile app dramatically shortened the time from training to operational readiness.

OPERATING WITHOUT CONNECTIVITY

The offline-first architecture proved essential in real-world combat operations, ensuring medical personnel could access critical information regardless of network availability.

RECLAIMING TIME FROM ADMINISTRATIVE BURDEN

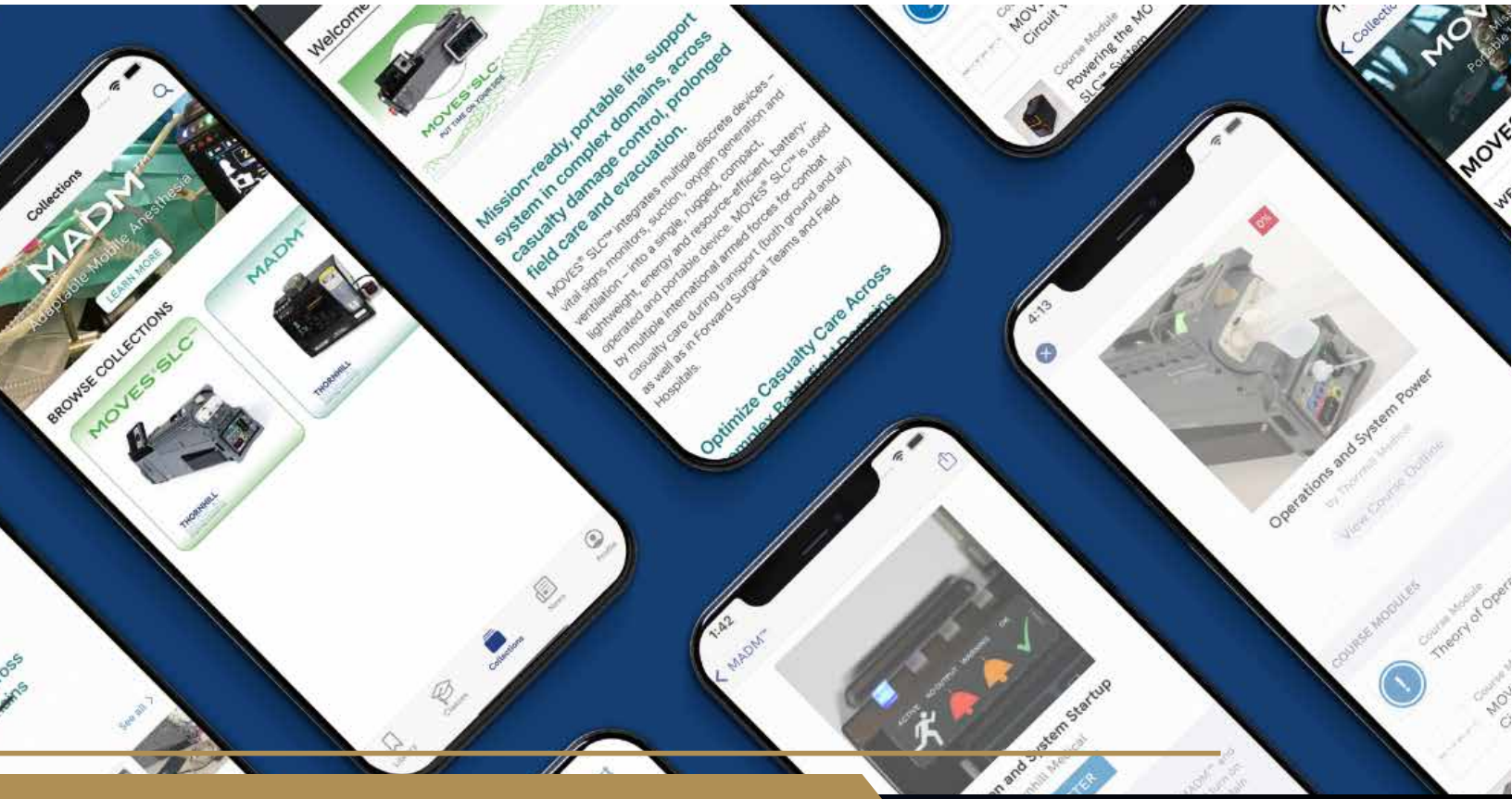
Centralized content management and push updates eliminated the need for repeated in-person training sessions and physical material distribution, allowing Thornhill Medical to focus resources on equipment production and technical innovation.

LOOKING AHEAD

Thornhill Medical continues to support Ukrainian medical teams with ongoing training and equipment deliveries. As of 2025, the company has provided training to combat medics, surgeons, anesthesiologists, nurses, medical students, and intensive care providers throughout Ukraine.

The partnership between Thornhill Medical and Allogy demonstrates what's possible when breakthrough medical technology meets mobile performance support designed for the most demanding environments. The results go beyond training, ensuring that life-saving expertise is available wherever and whenever it's needed most.

For organizations operating in essential services—whether military medicine, law enforcement, or healthcare—the lesson is clear: the best technology in the world is only as effective as the ability of personnel to use it confidently in the moments that matter.



ABOUT THE TECHNOLOGIES

MOVES® SLC™

The Mobile Oxygen Ventilator and Suction System is a micro-integrated life support system combining oxygen concentrator, oxygen-conserving ventilator, suction, and complete vital signs monitoring in a single rugged, battery-operated, 18-kilogram portable unit. FDA, CE, and Health Canada approved.

MADM™

The Mobile Anesthesia Delivery Module is the first portable in-line vapor anesthesia delivery device that turns any ventilator into an anesthesia workstation, enabling surgical capability in forward deployed and austere environments.

ALLOGY PLATFORM

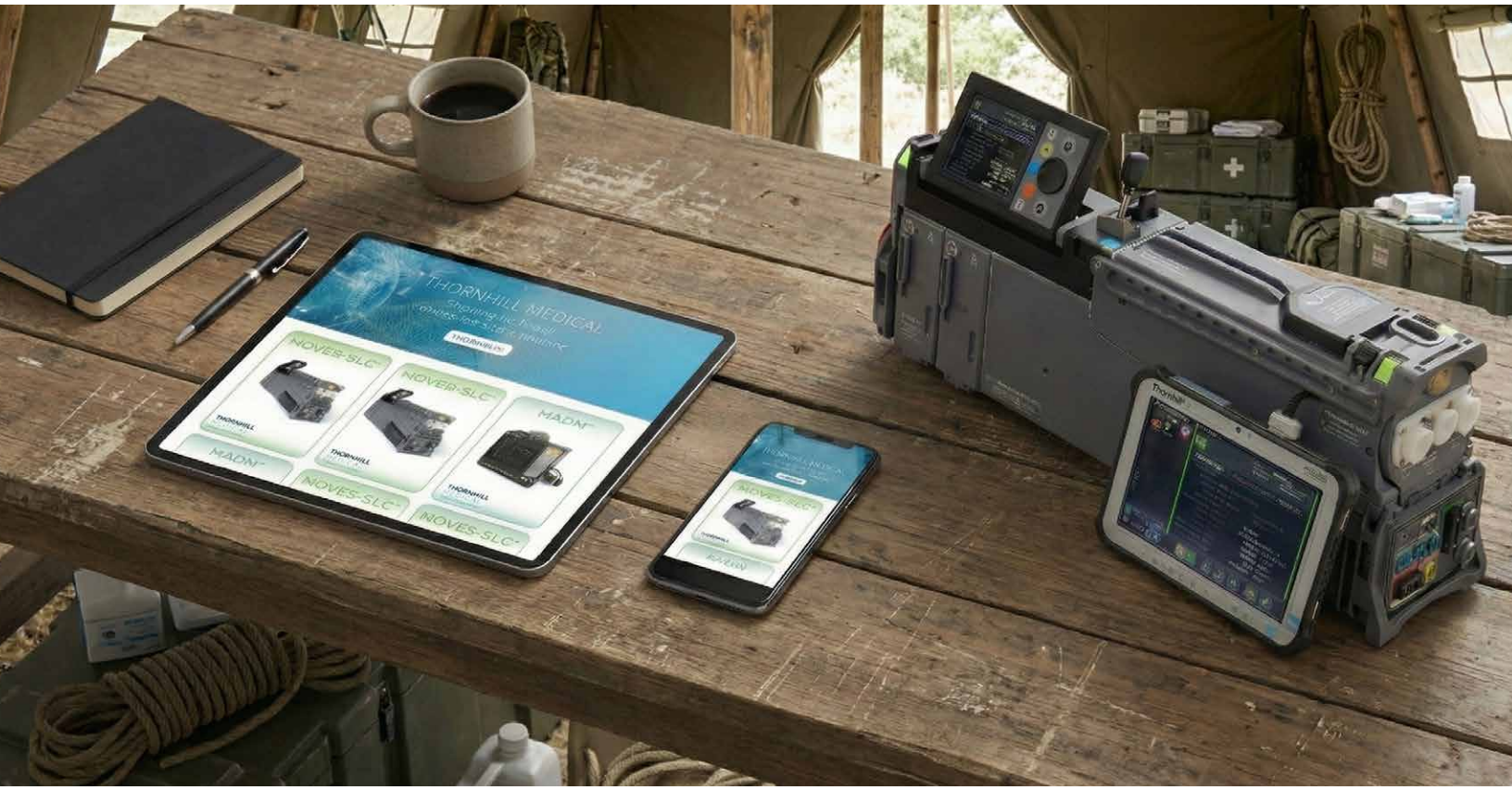
An offline-first mobile learning and performance support platform designed for essential services organizations. Capillary powers applications used by over 300,000 military medical personnel, law enforcement officers, and healthcare providers worldwide.

DOWNLOAD THE APP

MOVES SLC & MADM TRAINING

Download on the App Store

Available on the Apple App Store:
https://apps.apple.com/us/app/moves-slc-madm/id1603505090



For more information about Thornhill Medical's innovative medical technologies, visit thornhillmedical.com.

For more information about Allogy's Capillary platform and how it can scale expertise in your essential services organization, visit allogy.com.