LEQUEST

Online, interactive simulation training

Revolutionizing the utilization of medical technology

Overcoming barriers to medical device adoption and usage

As medical devices become increasingly sophisticated and subject to rapid technological advancement, such as AI, healthcare professionals require proper training to use them correctly, safely and consistently. Yet numerous logistical, financial, and operational hurdles often hinder the current training landscape — affecting both medical device companies (MDCs) and the healthcare organizations deploying their equipment. Without comprehensive and scalable training, end-users may apply devices incorrectly, leading to suboptimal patient outcomes, higher support costs, increased downtime due to malfunctions, and delayed market entry for new products.

> One significant barrier involves the need to gather trainers and trainees in a single location, which demands substantial time and resources: Travel expenses, time engagement of trainers, and staff downtime make traditional in-person training sessions expensive and difficult to schedule.

Moreover, when professionals spend extended periods away from their usual work settings, this disruption lowers patient care quality and reduces productivity in healthcare facilities — for MDCs, staff shortages within application support teams further increase these challenges. Plus, medical staff often perceive the availability of training opportunities as a sign of organizational support and professional acknowledgment. By investing in their ongoing development with the latest training technologies, healthcare providers not only enhance staff skills and expertise, but also foster a sense of recognition and value. At the same time, meeting global training demands while ensuring consistent quality and adapting to local market nuances requires extensive coordination.

In addition, tightening regulatory frameworks place new pressures on both MDCs and healthcare providers. Keeping pace with evolving regulations and increasingly rapid development cycles demands training solutions that remain flexible and robust. More generally, as product variation and complexity rise, inaccessible or inconsistent training undermines device adoption and slows market penetration.

Addressing these problems calls for training strategies that have a scalable, cost-effective, and readily accessible solution as their foundation. As competition intensifies and product life cycles shorten, MDCs and healthcare organizations urgently need platforms that streamline training, verify competency, and respond quickly to shifting market requirements.

The critical need for effective technological training

The ongoing advancements of medical technologies and the accompanying market competition are placing higher demands on training infrastructures. In this environment, device manufacturers that can confidently demonstrate well-trained end users are positioned to accelerate product adoption and reduce misuse-related complications. Today, digital transformation is at the heart of such training reforms.

> **As the healthcare sector increasingly embraces digital transformation and hospitals invest in integrated systems, the push for online simulation training continues to grow — reshaping how medical devices are adopted and deployed.**

Reformed digital training programs serve multiple business cases: digital transformation-driven training initiatives can differentiate an MDC's offering in a crowded landscape, helping it stand

out in tender processes and negotiations. At the same time, providing digitally uniform, comprehensive training content that is accessible anywhere, and at any time, can mitigate the cost pressures typically associated with bringing staff together for in-person sessions.

Digital transformation's functionality extends to compliance. Increasing regulatory scrutiny means that healthcare institutions must prove not only that they have purchased high-quality devices, but also that their staff can operate them safely and consistently. Verified, documented training — particularly when accompanied by assessment metrics — streamlines compliance. This capability helps align with local, national, and international standards, strengthening trust among regulators, purchasers, and clinicians alike.

> More generally, digital simulation-based training delivers standardized, on-demand access to realistic, interactive learning environments. They enable healthcare professionals to practice using devices without patient and device-damage risk, thereby improving familiarity and reducing long-term support overheads.

As the complexity of medical technology continues to grow, relying solely on one-off, classroom-based training sessions no longer serves the practical needs of healthcare teams. These traditional methods consume valuable time, often pulling clinicians away from patient care and imposing rigid scheduling constraints. Beyond inconvenience, outdated training approaches can contribute to uneven skill levels across departments, regions, and institutions — ultimately impacting device adoption and safe use.

Digital simulation-based training addresses these challenges by providing hands-on, scenario-driven exercises that mirror real-life clinical workflows. Instead of learning theoretical concepts in isolation, healthcare professionals can interact with lifelike device replicas on their own schedule, wherever they have internet

access. For instance, users may review the correct sequence for calibrating an infusion pump, or simulate adjusting ventilator settings for a difficult respiratory case. Each action and outcome is recorded, allowing trainees and their organizations to track progress and verify competency with quantifiable data.

This data-driven framework not only ensures that staff remain current on device updates and best practices, but also simplifies compliance with local and international regulations. Hospitals can quickly demonstrate that their teams have met prescribed training standards, while medical device companies gain confidence that their products are being used correctly. Moreover, by supporting usability studies aligned with FDA and CE/MDR regulatory requirements, simulation training providers, like LeQuest, help device manufacturers minimize risk through human factor validation and interactive testing — ensuring accurate, user-friendly operation from the outset. Plus, it's by reducing the need for in-person sessions and travel that simulation-based training alleviates logistical and financial pressures. The result is a more agile, accountable training ecosystem that supports rapid product adoption, higher satisfaction, and — above all — safer patient care.

LeQuest: Equipping today's healthcare professionals

LeQuest's platform exemplifies how tailored, simulation-based training can reshape the interaction between healthcare staff, medical device companies, and the devices themselves. In practice, this means that a busy nurse can log into the system during a break and troubleshoot a new anesthesia workstation, or that a recently hired technician can familiarize themselves with a dialysis machine's alarm limits without tying up a physical device on the ward — among the many other use cases across the healthcare sector.

> By integrating these interactive modules throughout a product's lifecycle, LeQuest ensures training remains continuously relevant.

When a device manufacturer releases a new software version or hardware update, the training content can be promptly adjusted and redeployed. This responsiveness streamlines post-launch support and reduces the burden on application specialists, freeing them to focus on more complex challenges.

The platform's multilingual and locally adaptive features allow it to accommodate not just a global audience, but also the subtle distinctions in regional workflows, regulatory standards, and prescribing habits. Because every session is logged and every trainee's performance is documented, healthcare providers and device companies can present concrete evidence of ongoing competency, yielding compliance, trust, certification, and accreditation.

It's important to note that simulation training does not necessarily replace in-person classroom sessions led by application specialists. Instead, it familiarizes healthcare professionals with a device's interface in advance, allowing any on-site training time to focus on advanced use cases and complex problem-solving.

LeQuest's track record, including partnerships with top global device manufacturers, demonstrates the platform's ability to boost training completion rates, enhance user proficiency, and support more reliable device utilization. It's by aligning technical rigor with human-centered learning experiences that LeQuest bridges the gap between advancing medical technology and the professionals who rely on it every day.

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