

CASE STUDY

Medical Technology Instrument Lock Out Tag Out

Equipment Locked



The Challenge

Lock Out Tag Out (LOTO) procedures are crucial when working with high-end medical instruments. These procedures protect both the integrity of the instruments and protect workers from hazardous energy sources by ensuring equipment is properly shut down and locked out during maintenance or repair work. A global medical technology field services organization was experiencing damage to equipment internal circuit boards caused by technician failure to perform LOTO procedures. Due to the deployment of various instruments globally, it was impossible to ensure compliance with LOTO. The company was experiencing a decrease in instrument uptime due to improper LOTO practices, resulting in worker safety liabilities, revenue loss, and opening the company to risks beyond its control.

The Solution

Instructional content created with CareAR[®] Experience Builder, part of the CareAR platform, enables field service technicians to gain access to LOTO training. This provides step-by-step guidance for each unique instrument at the point of service accelerating technician LOTO certification rates. The CareAR camera capture verification allows technicians to provide recorded compliance to protocols in the work order system.

Field service leaders utilize CareAR to ensure compliance with LOTO procedures. LOTO operations analytics enable the service team to identify who, where, and when faults occur and take corrective action before they occur.

Using CareAR[®] Experience Builder, the training teams created LOTO instructions in just one-third of the time it used to take them.

ABOUT THE ORGANIZATION

A leading global medical technology and digital solutions innovator with around 50,000 employees globally and \$18 billion in revenue. The company is investing heavily in research and development, with a focus on artificial intelligence, machine learning, and other innovative technologies applied to health care. The company is dedicated to creating a healthier world by providing innovative medical technologies, intelligent devices, and care solutions.

Working with CareAR

Using CareAR® Experience Builder, the training teams created LOTO instructions in just one-third of the time it used to take them. Before utilizing Experience Builder, instructions were limited to PDF-based documents published on the company's service portal. Documents were regularly outdated and not used by technicians, and there was no mechanism for holding technicians accountable for compliance.

With Experience Builder, updating and publishing protocols is as easy as clicking a button. QR code stickers on each unit remain up to date, ensuring 100% protocol accuracy. This removed the need to consistently verify if technicians are following the right procedure. Compliance has now improved to almost 100% and can be audited by field service leaders in the work order system.

CareAR analytics were utilized by the service team to identify instances of non-compliance with LOTO procedures and take corrective action. This has the potential to eliminate instrument damage and downtime by removing LOTO non-compliance.

One of the most notable achievements is the ability of company service and training professionals to create LOTO protocols that include visual verification captured in the work order management system without additional CareAR assistance.

Outcomes

- 96%** Global LOTO procedure compliance
- 157%** Reduction in instrument damage
- 85%** Instrument uptime Improvement
- 98%** Technician safety compliance
- 100%** Training certification pass rate

About CareAR

CareAR, A Xerox Company, is the Service Experience Management (SXM) leader. We make expertise accessible instantly for users through remote, live visual augmented reality and AI-driven interactions, instructions, and insights as part of a seamless digital workflow experience. CareAR sets the benchmark for the SXM category by bridging skills gaps, accelerating knowledge transfers, providing greater operational efficiencies, and enhancing customer outcomes and safety. Learn more at [CareAR.com](https://carear.com).

Ready to change the way you do work with augmented reality?

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