



Leading the Digital Transformation in Connected, Intelligent MedTech

Real-Time Innovations (RTI) is the infrastructure software company for smart-world systems, and is a trusted and strategic partner with leading MedTech companies across surgical robotics, patient monitoring, critical care, and medical imaging.



RTI's market and technology leadership is a result of aligning its remarkable capabilities and resources to create integrated system solutions. RTI's goal is to provide competitive, tailored solutions that get to the heart of problems and generate sustainable business value for its customers.

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FROST & SULLIVAN



The convergence of **robotics, AI, data analytics,** and **visualization** technologies is paving the way for a new era in MedTech, advancing breakthrough innovations that can deliver more precise, personalized, and predictive care. **Connectivity is the foundation** for the fundamental technologies that are transforming the industry.

RTI is accelerating this digital transformation by providing the **software infrastructure for real-time data connectivity, which enables the seamless integration of these important new technologies.** RTI's products, which are backed by **global engineering and support teams,** enable device manufacturers to achieve and accelerate the vision of connected healthcare across programs and product lines. RTI helps customers build a pipeline of MedTech innovation based on **flexible and scalable** architectures that can leverage the power of integrated and data-driven technologies.



Figure 1. Connectivity is the foundation for fundamental technologies transforming healthcare

rti.com/healthcare

RTI Connex: An Intelligent Connectivity Framework for Next-Gen MedTech

RTI Connex[®] provides a secure, scalable, and proven connectivity framework that distributes data flow in real time to ensure system safety, security, and performance. In addition, Connex includes a set of tools and SDKs that help product teams expedite across the entire development lifecycle from design to production.

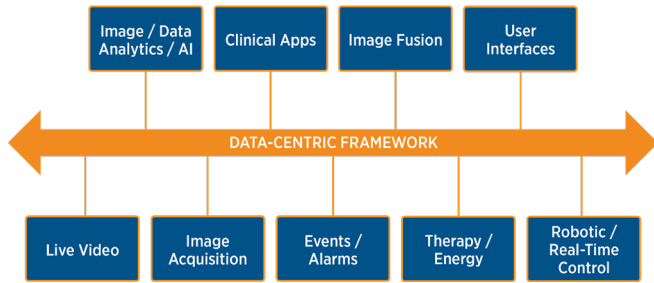


Figure 2: Data-centric connectivity allows systems to be designed around the most important asset: data flow

RTI works closely with leading device manufacturers to facilitate integration and optimize performance across subsystems, platforms and use cases. Product teams can focus on application development instead of infrastructure, leveraging the secure and scalable connectivity that Connex provides to **accelerate innovation and lower lifecycle and maintenance costs** across programs and product lines.

SECURE CONNECTIVITY BY DESIGN

The increasing complexity and connectivity of MedTech solutions contribute to higher cybersecurity risk. Part of the reason for this vulnerability is the simple fact that the healthcare sector presents a high-value target, with a growing attack surface and increasingly sophisticated threats. The FDA, global regulatory bodies, and Healthcare Delivery Organizations continue to raise the expectations on device manufacturers to deliver secure-by-design systems that are resilient in dynamic hospital environments.

Connex provides the ability to configure **fine-grained access control (least privilege) to data in motion**, enabling secure-by-design communications that align with the latest regulatory guidance for **secure and interoperable architectures** that can scale as the system evolves.

REAL-WORLD APPLICATIONS

RTI has **extensive expertise in distributed, real-time communications**, with over **2,000 design wins** across **mission-critical** industries. In MedTech, Connex enables **transformative innovation** across such applications as:

Surgical Robotics and AI

Next-generation robotic-assisted systems are transforming minimally-invasive procedures by leveraging the convergence of AI/ML, advanced robotics and sensors, data analytics and visualization technologies. RTI Connex is used in over **15 commercial robotics programs** to integrate **robotic instrumentation, command and control, monitoring, vision systems**, and intelligent surgical **guidance and automation** across applications, spanning a variety of clinical procedures.

Next-Generation Patient Monitoring

Intelligent patient monitoring solutions require data connectivity and processing from **hundreds to thousands of devices** across bedside devices, clinical viewing applications, central stations, and mobile applications. Connex is designed specifically to enable **secure, scalable, and reliable** data sharing across the dynamic environment of ICUs and ambulatory care.

Remote Care

Remote surgery enables patients in underserved regions to access the expertise of top-tier surgeons. RTI Connex addresses the connectivity challenges of **high-fidelity, low-latency, and secure communication over mobile and wide area networks**, enabling a new era of treatment for stroke, orthopedic, and other remote procedures.

Visit rti.com/healthcare to learn how leading MedTech companies are using Connex to transform healthcare.

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