ZOLL Medical Corporation is a leader in medical devices and software solutions that help advance emergency care and save lives, with products for defibrillation and monitoring, circulation and CPR feedback, data management, fluid resuscitation, therapeutic temperature management, and ventilation. In 2006, ZOLL acquired LifeVest—the world’s first and only wearable defibrillator.

The LifeVest wearable defibrillator is worn by patients at risk for sudden cardiac arrest. The device continuously monitors the patient’s heart, and if a life-threatening heart rhythm is detected, it delivers a shock to restore normal heart rhythm. The vest offers patients advanced protection and monitoring, as well as improved quality of life. However, the device requires a prescription from a cardiologist, as well as documentation to support the diagnosis and medical need for the LifeVest. On a daily basis, ZOLL receives hundreds of faxed orders along with supporting documentation for the LifeVest device. For patients at risk for sudden cardiac arrest, receiving the LifeVest as quickly as possible is vital. To manage the growing volume of these critical LifeVest faxes, ZOLL deployed the OpenText™ RightFax with RightFax Connect enterprise fax solution.

**Challenges**

As the only wearable defibrillator on the market today, ZOLL Medical has seen rapid growth with the LifeVest subsidiary. However, the increasing demand for the LifeVest device has led to an overwhelming volume of incoming faxes. According to Josh Stauffer, Director of Information Technology at ZOLL, “Because the product is ordered via cardiologist prescription, and doctors primarily still use faxing as their communication channel, we’ve grown from 100–200 faxes to 1,600 faxes a day on average.”

Initially, two small third-party cloud-based fax solutions had been used to manage the orders and documentation coming in through the LifeVest toll-free fax numbers. The setup was not ideal: ZOLL was using two separate fax solutions for redundancy purposes and the failover process was manual. As fax volumes grew, the solutions became unreliable.
“We’re confident in the OpenText RightFax Connect system that the faxes are being delivered in a timely manner that we can consistently rely on.”

JOSH STAUFFER, DIRECTOR, INFORMATION TECHNOLOGY, ZOLL MEDICAL CORPORATION

Stauffer describes the challenges: “The 800-number was owned by us. We managed the telecommunications connections (telco) around it, and if there was a problem with one solution, we’d manually switch over to the other one. If we needed support, we’d have to wait for 45 minutes to an hour. The solutions were basically geared more for online ‘mom-and-pop shop’ faxing.”

As fax volumes increased, ZOLL began having issues with unreliable fax delivery. Faxes failed mid-delivery or sometimes were not delivered at all. Stauffer realized it was time to make a change: “We were just overloading their fax server. We knew we had to take a step back.”

Solution

RightFax Connect Provides a Market-Leading Fax Solution

With such a rapid growth rate, it was clear that ZOLL needed an enterprise fax solution. Stauffer turned to his trusted, local strategic partner AEC Group, a Pittsburgh-based technology solutions provider that focuses on delivering infrastructure, virtualization, and communications solutions. Working with AEC Group, Stauffer and his team recognized that, as the market leader in fax solutions, RightFax was the best way to remedy their ailing fax system. RightFax provides the on-premises fax server infrastructure for their faxing operations. However, ZOLL also implemented RightFax Connect to transmit faxes via the cloud.

Stauffer describes the decision-making process: “We looked at the different options that OpenText RightFax has—a hybrid deployment of RightFax Connect using the cloud with the on-premises solution was perfect for us. And the price—OpenText beat the price of our existing fax solutions, based on the number of faxes that we have.”

Hybrid Cloud Deployment Provides a Safe, Secure Option

Because they were replacing existing cloud solutions, Stauffer was particularly interested in the RightFax Connect hybrid deployment option, which combines cloud-based delivery of faxes with the on-premises RightFax server. A fully outsourced, cloud-based telephony solution for the RightFax server, RightFax Connect frees up valuable IT resources, yet it protects data using industry-standard encryption algorithms, security controls, and safeguards. The solution provides full control over the on-premises RightFax server and data, even when transmitting via the cloud.

By moving fax transmission to the cloud, RightFax Connect automatically provides the capacity needed for the growing LifeVest fax volumes in a cost-effective manner. RightFax Connect also provides a very important benefit to ZOLL: no busy signals for incoming faxes. With the urgent nature of their business, reliably receiving and processing incoming faxes is critical.

Stauffer explains that the main appeal of the hybrid option was “not managing the telco component of the solution. Having fax servers and dealing with the telco and the lines and all of those modems, it was an easy choice to say, ‘I don’t want all of this stuff on-premises.’ So, along with stability, scalability, and market presence, that’s really what steered me toward RightFax Connect.”

Implementation

With more LifeVest orders coming in every day, Stauffer and his team were quick to implement the new system. Soon, all inbound faxes were coming through the RightFax solution. “About 1,600 faxes per day,” says Stauffer. “It’s all the documentation around the LifeVest prescriptions—patient agreements, medical orders, repeat documentation.”

Using RightFax Connect, the team was able to port over its toll-free numbers. Stauffer describes the process of transferring ownership of the toll-free numbers to RightFax: “The whole process was really smooth. Our two numbers receive the bulk of the 1,600 faxes a day, and that transition went very smoothly.”

Now, when a faxed order comes in to the LifeVest number, RightFax Connect securely delivers the fax to the on-premises RightFax server, which then delivers the fax to an email inbox. From there it enters ZOLL’s order/ticket system, Request Tracker. All faxes enter a main queue and are then put in regional queues for immediate processing.

Benefits

Cloud-Based Fax Delivery

The solution’s hybrid deployment option has given ZOLL all the ease and flexibility of a cloud solution but with the on-premises RightFax server. Stauffer explains: “I like the hybrid cloud ability of OpenText RightFax Connect. I can offload the telco component and let the experts do that. I don’t have to worry about it.”

Stability and Reliability

With RightFax up and running, Stauffer can now rest assured knowing the solution has the capacity to handle the daily volumes of critical LifeVest documents. “We’re confident in the OpenText RightFax Connect system that the faxes are being delivered in a timely manner that we can consistently rely on.” Whereas they previously used two separate fax solutions for failover and redundancy, RightFax Connect has built-in high availability, redundancy, and automatic failover all in one enterprise-grade solution.
The reliability of the RightFax system now allows ZOLL to meet certain time-sensitive service level agreements (SLAs). Stauffer describes the requirements: “We have some SLAs in place for staff to touch these faxes within an hour of when it was received. Any 10- to 15-minute delay has an impact. We have an agreement that if you get all your documentation in by two o’clock today, you’ll be fitted with the LifeVest by two o’clock tomorrow.”

**Regulatory Compliance**

Because LifeVest faxes contain protected health information, ZOLL must ensure that all the HIPAA-required physical, network, and process security measures are in place to protect sensitive patient data. With OpenText RightFax Connect, data is secured with multiple layers of hardware and logical access controls including multi-tiered firewall architecture, intrusion detection/prevention systems, and multiple layers of end-to-end encryption to protect data in transit.

Stauffer sums up the benefit the solution delivers when it comes to regulatory compliance: “We want to make sure that as we continue to grow we remain HIPAA-compliant. From a HIPAA standpoint, I can manage the access to those documents here on-premises. The OpenText RightFax solution helps ensure we remain HIPAA compliant.”

**Fax Traffic Visibility**

With RightFax automatically tracking all fax traffic, Stauffer and his team now benefit from full visibility and management of faxes. Stauffer explains: “We have reports now that we didn’t have in place prior to RightFax. There were just so many question marks before, and we didn’t really have a good reporting facility from the other inadequate fax solutions we had been using. We couldn’t even tell you if faxes were being delivered. We couldn’t tell you if they were full faxes or not. We were getting partial faxes, pages cut off, and other similar issues. We were fighting fires for the longest time, without a lot of that visibility that we have now.”

**Cost Savings with RightFax**

In addition to avoiding the costs of in-house telephony by using the hybrid cloud model, ZOLL has also seen cost savings based on the RightFax pricing model. Stauffer explains: “RightFax Connect is less expensive per page, compared to what we used to pay. When you get to the number of pages that we were pushing through their systems, the cost was just incredible. So it’s definitely more cost-effective and will continue to scale to meet our growing business demands.”

**Future**

As Stauffer looks ahead to the next step with RightFax Connect, he plans to migrate all outbound faxing to the new solution. Outbound fax volumes are also on the rise, since part of the LifeVest ordering process involves outbound fax communication with insurance companies. Once documentation is faxed in to ZOLL, much of it is faxed back out to insurance companies.

Stauffer also intends to optimize the business processes around handling faxes once they are received. “Currently, there’s a manual process where someone has to open the document to identify what type of document it is, whether it is complete, whether it contains multiple documents that have to be split out into single documents, and who it should be routed to next.” To automate this process, Stauffer is considering leveraging the ability of RightFax to integrate with OpenText Capture Center, which uses advanced document and character recognition capabilities to capture the data in scanned images and faxes and interprets it using optical character recognition (OCR), intelligent character recognition (ICR), intelligent document recognition (IDR), adaptive reading, and other technologies. This automation would allow incoming faxed documents to be routed based on fax content, type of document, patient information, and other defined fields.

Knowing the stakes are high when it comes to the delivery of LifeVest orders, Stauffer is confident in the solution: “I would highly recommend the RightFax Connect solution. As a hybrid cloud deployment, it is the ideal enterprise solution to support our business today, while allowing us to scale for the future.”