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TIM CURRIE | MANAGER, INFORMATION TECHNOLOGY

CryoLife

Global medical device manufacturer automates in-hospital consignment inventory management by arming its sales force with Apple iPhones and RFgen Mobile Foundations for SAP.

At a glance...

Industry
Biomedical

Application
Consignment Inventory Management

Environment
SAP 7.4

The Challenge

Founded in 1984, CryoLife is a global biomedical company that manufactures devices used in life-saving surgeries. It was the first biomedical company to specialize in low-temperature preservation of cardiovascular tissue. Among the company's many industry-leading products are mechanical heart valves, cardiac and vascular allografts for adults and children, and BioGlue® surgical adhesive that has been used in more than one million procedures worldwide.

Tim Currie is the Manager of Information Technology at CryoLife. He came to the company during its acquisition of On-X Life Technologies—manufacturer of mechanical heart valves.

"It is common in the mechanical valve industry to maintain consignment inventory on-site in the hospitals and surgical centers where they do implants. If your valve is not on the shelf, surgeons are going to grab another vendor's valve," Currie explained. "Before we implemented RFgen, our sales reps used a very paper-based process. Sales reps would visit the surgical center with a printout and try to check off what was on the shelf versus what was on the paper. Sometimes the inventory information was stale and inaccurate."

The CryoLife sales force serves over 550 hospitals and surgical centers. On-X Life Technologies tracked consignment inventory using a paper-based process, but CryoLife wanted a more automated, efficient and accurate system.

The Solution

Currie reviewed three possible solution vendors, including RFgen. He then invited two of the vendors to give demonstrations to the sales management team. RFgen was selected unanimously.

"RFgen did a better job of preparing for the demos and making our demos look and feel more like how it was probably going to look and feel in the real world," Currie recalled.

RFgen Mobile Foundations for SAP software is a suite of pre-written, SAP-certified data collection solutions that feature real-time, bi-directional information exchange with your SAP system. RFgen fully supports remote operations, including disconnected scenarios where data is preloaded onto the mobile device and transactions are exchanged with SAP software at a later time. This was important to CryoLife because sales reps often lacked connectivity inside the hospitals.

The solution also enables development of online and offline Android®, iOS and Windows® mobile apps and runs on any type of mobile device including consumer-grade devices. This was also important since CryoLife wanted to utilize Apple® iPhones® as a standard mobile device issued to their sales force for this purpose.

RFgen

The Result

RFgen made it possible for CryoLife sales reps to:

- Replace paper-based cycle counts with paperless mobile data collection.
- Conduct efficient cycle counts of consignment inventory in hospitals, in offline mode with automatic updating of SAP when connectivity is reestablished.
- Seamlessly transfer products from personal sample stock to surgical centers or other CryoLife sales reps.
- Easily download, setup, and activate the RFgen consignment inventory app on any iOS, Android or Windows mobile device.
- Submit inventory photos and capture customer signatures in the field.
- Trace any serialized or lot-controlled product.
- Conduct cycle counts in English, French or German with the appropriate regional date formats.

Cycle Counts of Consignment Inventory in Offline Mode

Sales reps are responsible for the consignment inventory held in hospitals within their sales territories. They're required to perform cycle counts every six months.

"Sales reps often get into areas of the hospital where they cannot get onto Wi-Fi or their cell coverage does not penetrate the building. Therefore, we needed RFgen to work offline, and it does," Currie said.

Sales reps log onto the system and download inventory information to their iPhone. They can view a list of hospitals in their territory and receive all of the inventory details pertaining to any of those hospitals. After downloading the data, they enter the hospital and scan everything found in inventory. After scanning is done,

RFgen provides a reconciliation screen where reps can resolve any issues while they are at the hospital. Once they select 'submit' and Wi-Fi connectivity is reestablished, RFgen sends the data back to their SAP system for processing.

More Efficient Replacement of Expiring Products

During cycle counts, RFgen warns if a product is nearing expiration. The expiration window applied is dynamic and configurable to each product type. On the reconciliation screen, sales reps can leave a comment next to the warned product asking customer service to generate a Return Merchandise Authorization (RMA).

"Before RFgen, it may have required a few extra phone calls or maybe an email exchange to pull a valve back. RFgen has definitely taken some of the administrative burden away from our sales reps," said Currie.

Digital Signatures and Inventory Photos

Sales reps can collect customer signatures and submit multiple images of the inventory itself. A customer can quickly sign on the screen using a finger and enter their name using the keyboard. RFgen updates SAP with the printed name and digitally captured signature.

With RFgen, sales reps can use their iPhones to take photos of inventory items that get submitted automatically with the cycle count data. They can also add notes to help administrative staff understand the results of the cycle count.

"Being able to capture images is a really nice feature that saves our back-end processors time. The processors can use the pictures to answer questions before they have to be asked. It's good objective evidence," said Currie.

Traceability for Serialized and Lot-Controlled Inventory

CryoLife rolled out RFgen in two phases. The On-X mechanical valves are serialized, so the first phase was designed to capture serial numbers.

Since each serial number is a unique identifier, the quantity inventoried is always one. Other CryoLife products are lot-controlled, so the second phase added the ability to recognize lot-controlled products by their barcodes and then prompt the sales rep to enter quantity. RFgen provides CryoLife with full traceability of its products whether they are serialized or lot-controlled.

Multi-language and Regional Date Formats

CryoLife employs about 70 field sales reps in the U.S., Europe, and South Africa. RFgen supports multiple languages and date formats for global companies, so the sales reps can conduct cycle counts in English, French or German. RFgen also presents the appropriate date format for each region.

Rapid Deployment and Intuitive Learning

RFgen is designed to deploy very quickly and easily, and CryoLife was no exception. Currie said, "I am still fairly impressed that we rolled out RFgen remotely. I went to Kennesaw once to do a demo for the sales team prior to our first production release. Sales reps have been able to download RFgen, launch it, configure it, and get their iPhones activated without us leaving our office."

The RFgen consignment inventory app has been "very well received" by the sales force. "It is certainly making the cycle count process easier. Sales reps appreciate having an automated system right on their iPhone versus the old paper-based system," said Currie.