

Seeing new opportunity

Cardinal Health™ Inventory Management Solutions optimize the supply chain at Emory Saint Joseph's Hospital

Taking control of the future

The Affordable Care Act (ACA) mandates that health systems eliminate waste, and across the country they're responding by pledging to cut billions of dollars in unnecessary costs. A prime target is the medical-surgical supply chain. And for Emory Saint Joseph's Hospital in Atlanta, a key strategy is improving inventory management by automating product tracking and utilization.

"With the rollout of the ACA and changes to reimbursements, it's important that we control expenses more than ever," said Julie Swann, MBA, MHA, BSN, RN, Specialty Director, Cardiology Services/eICU for Emory Saint Joseph's Hospital. "Over the next five years, it will be a mandate for C-Suites everywhere. At Emory Saint Joseph's, we're being careful with supply costs, so we don't have to look at reducing labor to control expenses. The Cardinal Health RFID solution is a solid way to help us do that. Now we have an up to date and live look at inventory—easily seeing expired and missing products in real time and setting par levels." And that's just the beginning.

Meeting aggressive goals

The Cardinal Health RFID solution is helping Emory Saint Joseph's effectively manage more than \$2.5 million in inventory, monitoring over 2,000 SKUs in seven Cardiac Catheterization labs and three Electrophysiology labs. The approach is improving financial, clinical and operational performance by:

- **Saving inventory costs:** The Cardinal Health RFID solution reduces and right-sizes on hand inventory, setting accurate par levels based on real-time usage patterns. The approach also optimizes bulk buys to take advantage of cost savings without tying up cash on the shelves with unneeded products. And it eliminates overnight shipping due to stockouts.
- **Maximizing revenue:** Emory Saint Joseph's captures all patient charges at the point of care—and manages missing items daily to avoid loss charges.

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Julie Swann, MBA, MHA, BSN, RN
Specialty Director, Cardiology Services/eICU
Emory Saint Joseph's Hospital

About Emory Saint Joseph's Hospital

Part of the Emory Healthcare system, Emory Saint Joseph's Hospital was founded by the Sisters of Mercy in 1880 and is Atlanta's oldest hospital. Today, the 410-bed, acute-care facility is recognized as one of the top specialty-referral hospitals in the Southeast.

As a leader in cardiac, neurologic, vascular, gastrointestinal, respiratory, orthopedic and cancer care, among others, Emory Saint Joseph's offers its patients the latest procedures and treatments by providing its medical staff, comprised of more than 750 physicians, with research services and the most advanced technology available. In addition to serving the metro-Atlanta area, patients come from all over Georgia and nearby states because of Emory Saint Joseph's specialized services, excellent reputation and unique patient experience.

As a result of its medical excellence, compassionate care and cost-effectiveness, Emory Saint Joseph's is Georgia's only hospital to have received the Top 50 Hospitals USA designation. Emory Saint Joseph's has received numerous other awards, including: the distinguished Magnet Recognition for Nursing Excellence from the American Nurses Association Credentialing Center — Emory Saint Joseph's is the only community hospital in the world to earn five Magnet designations; a designation of best in Georgia and top five percent in the nation for cardiac and vascular programs; and Solucient's list of 100 Top Hospitals in the country for cardiac and orthopedic care. Emory Saint Joseph's is also the only Atlanta hospital named to J.D. Power and Associates Distinguished Hospital Program for Service Excellence.

More data, more visibility, more insights.

Cardinal Health RFID-enabled technologies combine easy-to-use RFID and barcode tracking technology, mobile apps and cloud-based analytics software to monitor high-value consumable products from the manufacturer to the point of care. Real-time, end-to-end tracking helps healthcare providers optimize inventory levels and lower costs, support patient safety, improve workflows—and gain new insights into improving performance.

“The true advantage of the Cardinal Health RFID solution is providing real-time supply chain visibility for the real world.”

Carola Endicott

Vice President, Operations and Services/
RFID-enabled technologies
Cardinal Health

Meeting aggressive goals *cont.*

- **Automating inventory management:** Now hospital staff can order products based on projected usage, decreasing shelf life and improving turn rates. The system monitors high-use products to avoid stockouts—and low-use products to exchange them before expiration. Automated processes help prevent manual errors.
- **Optimizing clinical workflow:** From picking products to capturing usage to returning unused products to inventory, the Cardinal Health RFID solution improves efficiency everywhere.
- **Supporting patient safety:** Automated alerts notify staff of expiring and recalled products—before they can be used with patients.
- **Increasing clinical satisfaction:** Now there is greater product availability, so clinicians don't need to be concerned about stockouts.

Better than barcoding

When Emory Saint Joseph's first decided to update its inventory management and usage tracking system, the plan was to implement barcoding in two high-volume procedure areas, the Cardiac Catheterization and Electrophysiology labs. Then the Cardinal Health RFID solution came to the table and that changed everything.

“Emory Saint Joseph's saw that there would be an immediate ROI with a minimal investment of time and IT resources,” said Lisa Stepps, Account Manager for Cardinal Health. “There wouldn't be the year of transition that barcoding would require.” Instead of extensive new construction, Emory Saint Joseph's could simply replace the current wire shelving in the procedure areas with Cardinal Health Smart Cabinets.

The Cardinal Health RFID solution was an attractive alternative to barcoding for another critical reason: “Barcoding can't tell you what inventory you have on hand, every minute of every day,” Stepps said. The Cardinal Health RFID solution provides that unprecedented visibility, giving Emory Saint Joseph's an effective, data-driven tool to optimize inventory, while supporting patient safety and clinical satisfaction.

“The true advantage of the Cardinal Health RFID solution is providing real-time supply chain visibility for the real world,” said Carola Endicott, Vice President, Operations and Services for Cardinal Health. “This is the first end-to-end supply chain solution that can give Emory Saint Joseph's what every provider needs to succeed in the new healthcare world: more control over supply costs.”

Tracking products, setting pars

"The problem in the procedure areas was that there was a lot of product in the storerooms," Swann said. "When we first started using the Cardinal Health RFID solution, we were able to do some 'spring cleaning' right away and save \$10,000 in inventory holding costs." With that baseline inventory level established, Emory Saint Joseph's was then able to adjust par levels to match utilization.

"Before RFID, our inventory visibility was limited to knowing what we had ordered. Now, we're tracking actual usage patterns in real-time—and automatically setting accurate par levels," said Chuck Naylor, Senior Business Manager at Emory Saint Joseph's Hospital. "There's not enough time in the day to manually set pars. Now, they're preset and can be overridden if necessary—and there's no learning curve to do it."

"Now we're tracking actual usage patterns in real time—and automatically setting par levels."

Chuck Naylor

Senior Business Manager
Emory Saint Joseph's Hospital

In the first 18 – 24 months of using Cardinal Health RFID, Emory Saint Joseph's was steadily shrinking inventory to match utilization. According to Naylor, "Cardinal Health RFID definitely reduces inventory," in a controlled and measured way. Automated reports also improve inventory management. For example, Emory Saint Joseph's can create prospective reports for products due to expire in the near future. So they can be used or replaced, as needed, before expiration.

The Cardinal Health RFID solution improves revenue as well.

"Cardinal Health RFID integrates with our charting and documentation system, which cuts down on manual errors and improves charge capture," said Lisa Newton, Unit Director of the Electrophysiology (EP) Lab.

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Unit Director, EP Lab
Emory Saint Joseph's Hospital

Launching success

"Once the RFID infrastructure was set up, the Cardinal Health team came in en masse," Naylor said. "There were plenty of boots on the ground. During the first month of implementation, there was a dedicated Cardinal Health RFID person on-site."

"The staff said, 'This is all I have to do, and Cardinal Health does the rest?' There was immediate buy-in."

Lisa Stepps

Account Manager, RFID-enabled technologies
Cardinal Health

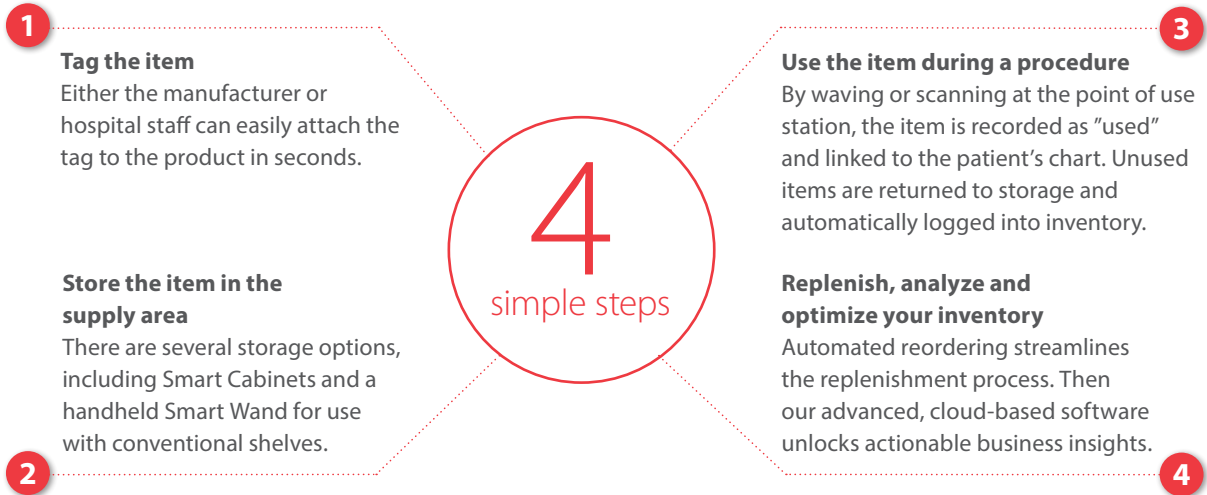
Products were tagged over a weekend, and Emory Saint Joseph's was able to identify and pull expired products right away. "It was eye opening. The staff was pleasantly surprised—and it was a win-win from day one," Stepps said. "The staff said, 'This is all I have to do, and Cardinal Health does the rest?' There was immediate buy-in. There was also a lot of confidence from the physicians, who have never been without a product since the implementation of the Cardinal Health RFID solution."

Because of the high product visibility that the system provides, there is ample flexibility to adjust inventory levels based on changes in utilization patterns. "Can I order more or less, based on these patterns—and still save money as I do? Cardinal Health enables Emory Saint Joseph's to do just that," Stepps said.

Improving supplier relations

"Suppliers love the stronger communication and collaboration that Cardinal Health creates," Stepps said. For example, the data generated by the Cardinal Health RFID solution supports the hospital's compliance with their market share agreements. "In fact, many suppliers tag their products for us," Stepps said, further saving staff time at Emory Saint Joseph's.

Greater inventory control in...



Real-time, end-to-end supply chain control and visibility means:

No more manual counting or data entry—saving time and eliminating human error.

No more inventory "blind spots" caused by owned and consigned products.

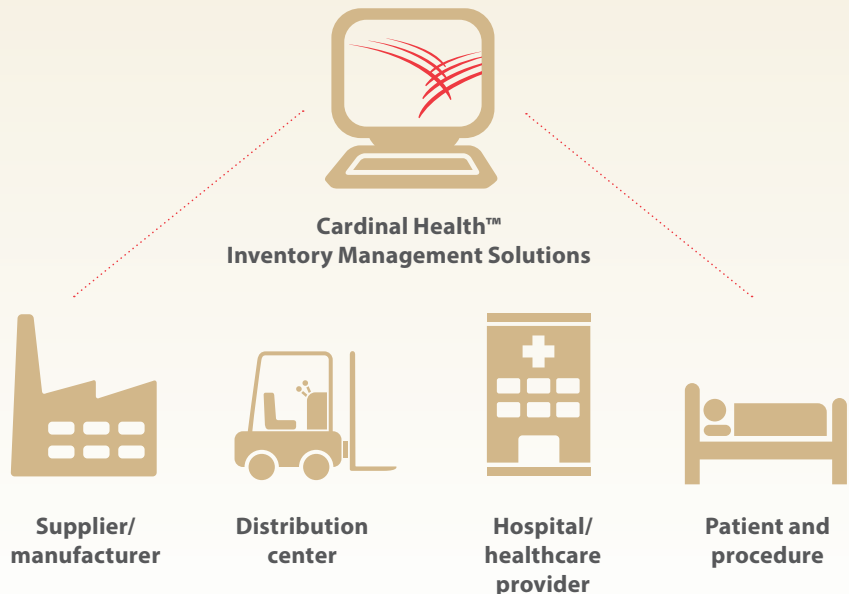
Over- and under-ordering is a thing of the past.

So is carrying and paying for more inventory than you need.

Patient safety is supported and clinicians are more satisfied.

The Cardinal Health difference

Upstream and downstream supply chain visibility enabled by a single software platform with integrated analytics



Just getting started.

The more hospital systems are tasked with reducing costs while supporting patient care, the more technology can play a critical role. For Emory Saint Joseph's, the Cardinal Health RFID solution is an important part of the leading hospital's savings and quality strategy. And we're just getting started.

ROI

at a glance

Saved
3 hours
in labor every day
ordering products.



Eliminated
100%
of overnight
shipping costs
due to stockouts.



Improved
Electrophysiology Lab
(EP) inventory turns by
60%

Recovered
\$300,000
in chargeable product costs
through active alerts.



Major
improvements
from
2012 to
2013

Automated
100%
of expiration and
recall alerts to
support patient
safety initiatives.



Reduced aging
inventory and
maximized
throughput with



84%

of products less than
one year old.

Tracked
100%
of short-dated
products to
help avoid
expiration
and maximize
utilization.



About Cardinal Health

Cardinal Health, Inc. (NYSE: CAH), a global health services and products company, brings scaled solutions that help our customers thrive in a changing world. We improve the cost-effectiveness of healthcare through solutions that improve the efficiency of the supply chain; optimize the process and performance of healthcare; provide clinically proven, daily use medical products and pharmaceuticals; and connect patients, providers, payers, pharmacists and manufacturers for seamless care coordination and better patient management. Backed by nearly 100 years of experience, we rank among the top 50 on the Fortune 500 and among the Fortune Global 100. We support our partners with more than 37,000 employees in nearly 60 countries worldwide. For more information, visit cardinalhealth.com and @CardinalHealth on Twitter.



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