Seeing new opportunity

Cardinal Health Inventory Management Solutions optimize the supply chain at Emory St. 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 St. 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 St. Joseph's Hospital. "Over the next five years, it will be a mandate for C-Suites everywhere. At St. 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 St. 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:** St. Joseph's captures all patient charges at the point of care— and manages missing items daily to avoid loss charges.

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Specialty Director, Cardiology Services/eICU
Emory St. Joseph's Hospital

About Emory St. Joseph's Hospital

Part of the Emory Healthcare system, St. 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, 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 Saint Joseph's specialized services, excellent reputation and unique patient experience.

As a result of its medical excellence, compassionate care and cost-effectiveness, Saint Joseph's is Georgia's only hospital to have received the Top 50 Hospitals USA designation. Saint Joseph's has received numerous other awards, including the distinguished Magnet Recognition for Nursing Excellence from the American Nurses Association Credentialing Center; 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. Saint Joseph's is 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, elevate 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.

- **Improving 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 St. 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.

"St. 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, St. 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 St. Joseph's an effective, data-driven tool to optimize inventory, while improving patient safety and clinical satisfaction.

"The true advantage of the Cardinal Heath 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 St. 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, St. 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 St. 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 St. Joseph's Hospital

In the first 18 – 24 months of using Cardinal Health RFID, St. 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, St. 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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> **Lisa Newton**
> Unit Director, EP Lab
> Emory St. 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."*
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> **Lisa Stepps**
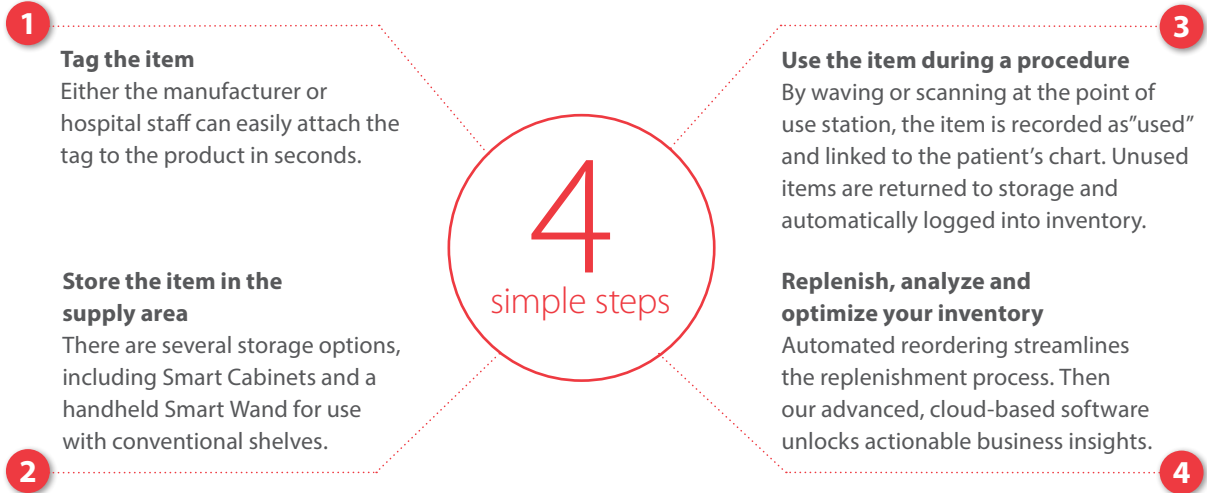> Account Manager, RFID-enabled technologies
> Cardinal Health

Products were tagged over a weekend, and St. 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 St. 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 compliance with market share agreements. "In fact, many suppliers tag their products for us," Stepps said, further saving staff time at St. Joseph's.

Greater inventory control in…

1

Tag the item
Either the manufacturer or hospital staff can easily attach the tag to the product in seconds.

Store the item in the supply area
There are several storage options, including Smart Cabinets and a handheld Smart Wand for use with conventional shelves.

2

4
simple steps

3

Use the item during a procedure
By waving or scanning at the point of use station, the item is recorded as"used" and linked to the patient's chart. Unused items are returned to storage and automatically logged into inventory.

Replenish, analyze and optimize your inventory
Automated reordering streamlines the replenishment process. Then our advanced, cloud-based software unlocks actionable business insights.

4

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

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

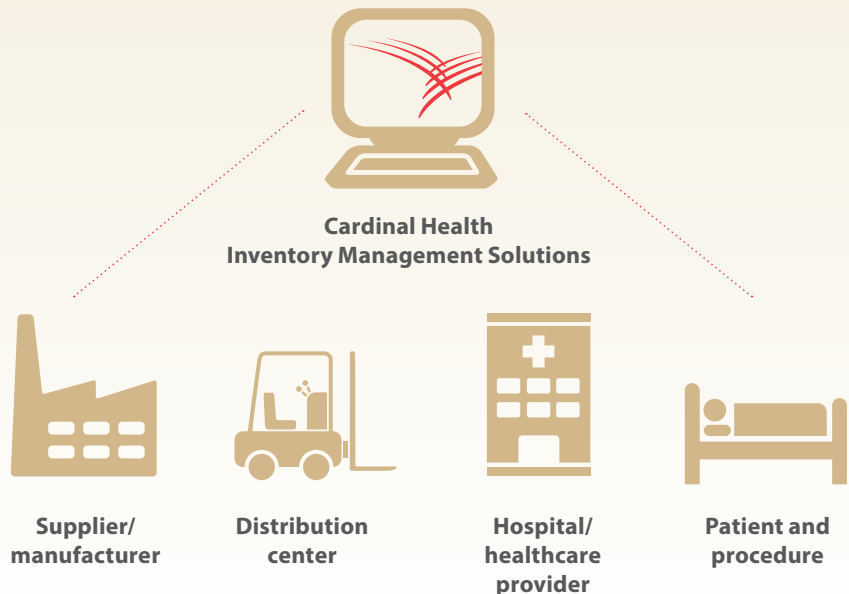No more inventory "blind spots" caused by owned and consigned products.

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

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

Patient safety is enhanced and clinicians are more satisfied.

The Cardinal Health difference

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

**Cardinal Health
Inventory Management Solutions**

| Supplier/
manufacturer | Distribution
center | Hospital/
healthcare
provider | Patient and
procedure |

Just getting started.

The more hospital systems are tasked with reducing costs while improving patient care, the more technology can play a critical role. For St. 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 meet highest patient safety standards.

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

Headquartered in Dublin, Ohio, Cardinal Health, Inc. (NYSE: CAH) is a $101 billion healthcare services company that improves the cost-effectiveness of health care. As the business behind health care, Cardinal Health helps pharmacies, hospitals, ambulatory surgery centers and physician offices focus on patient care while reducing costs, enhancing efficiency and improving quality. Cardinal Health is an essential link in the health care supply chain, providing pharmaceuticals and medical products to more than 100,000 locations each day. The company is also a leading manufacturer of medical and surgical products, including gloves, surgical apparel and fluid management products. In addition, the company supports the growing diagnostic industry by supplying medical products to clinical laboratories and operating the nation's largest network of radiopharmacies that dispense products to aid in the early diagnosis and treatment of disease. Ranked #19 on the Fortune 500, Cardinal Health employs more than 33,000 people worldwide. More information about the company may be found at cardinalhealth.com and @CardinalHealth on Twitter.

CardinalHealth
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