

# Supply Documentation at the Point of Use Without It, You're Leaving Money on the Table

*By Cory Turner*

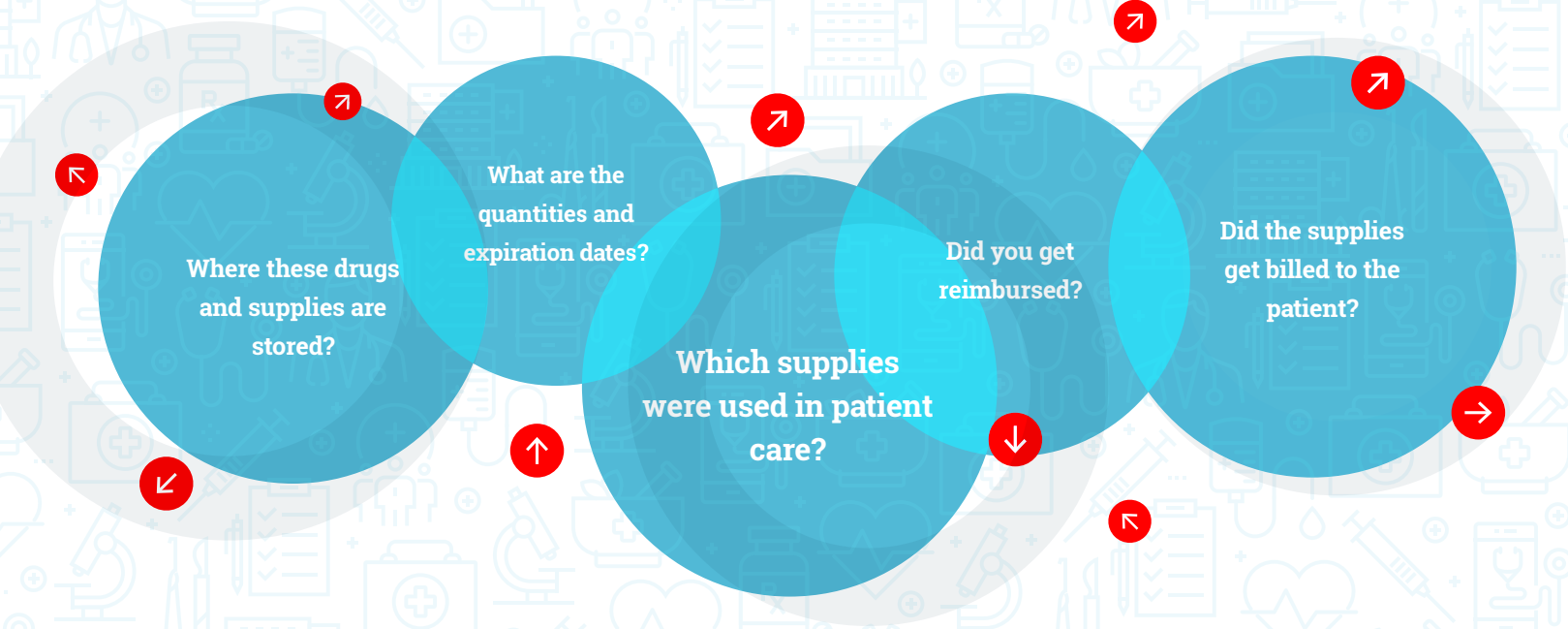
**E-BOOK**



# Stop Wasting and Start Saving

Within your hospital today is a substantial volume of medical/surgical and pharmaceutical supplies at a value of anywhere between \$2.24M and \$56M.<sup>1</sup> These supplies are housed in many different locations – from central stores to procedural areas – and managed by any number of staff members, the majority having no formal inventory management training.

## Can you say with confidence that you know...



## Supply inventory by the numbers

**\$11.9M**

Average hospital medical/surgical supply cost.<sup>1</sup>

**\$2.24M**

Average medical/surgical supply cost for hospitals with 25 beds or fewer.<sup>1</sup>

**\$56M**

Average medical/surgical supply cost for hospitals with 250 beds or more.<sup>1</sup>

Operating a supply chain without inventory visibility is like being blindfolded with your hands tied. If you can't see the supplies you have purchased, you can't do anything to manage them.

While you may have point of use (POU) systems for par level inventory replenishment in clinical areas (e.g., nursing units, perioperative, cath labs), if these systems are not integrated within a broader platform, you can only see within each silo.

Furthermore, if these location-specific tools are not integrated with your enterprise resource planning (ERP) and electronic health record (EHR) systems, you cannot track supply procurement through use.

### [ WHERE YOU ARE LOSING MONEY ]

- Lost and damaged items
- Expired products
- Missed charges
- Over ordering
- Supply use variance
- Clinician time

## Real-world Examples

In the e-book **Missing Pieces of Your Supply Chain Puzzle**, we offered an overview of inventory management challenges, describing why the ERP, EHR and individual point of use systems are incapable of providing the visibility needed to effectively manage supplies throughout a hospital or health system.

In this e-book, we present real-world examples of U.S. health systems and hospitals of all sizes that have optimized inventory management in clinical areas through a consolidated, automated and electronic platform.

While the end goal for each healthcare organization is enterprise-wide inventory visibility and control, they started their journeys in different places. Most often they chose a clinical area that was a major source of revenue leakage: From increasing charge capture in the perioperative space to preventing product hoarding and expiry waste in the nursing units.

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### Cath Lab

#### Supply Situation

**On average, hospitals may have 6,000 to 8,000 stock keeping units (SKUs) of inventory in-house at any time, but may carry up to 35,000 SKUs.<sup>3</sup> Most of these are high-cost products that are billable/reimbursable. Many also have unique device identification (UDI) data capture requirements for recall management and adverse event reporting.**

Frontline clinicians are spending an average of 17% of their working hours on inventory management.<sup>4</sup> Supply chain teams struggle with visibility into and control over cath lab inventory because most of the high-cost products fall outside of the ERP system/item master.

65%

The operating room, cath lab and interventional radiology lab generate 65% of a hospital's supply expenses and 5% of these items can represent 85% of the spend.<sup>2</sup>

## SUCCESS SNAPSHOT

# Munson Healthcare

Munson Healthcare<sup>5</sup> is a nationally recognized regional nonprofit health system consisting of nine hospitals serving 24 counties in northern Michigan.

Their goal was to improve management of its cath lab inventory to maximize clinician time spent with patients.

The health system implemented an enterprise-wide, electronic inventory management system with RFID and barcode technology to track and trace all supplies and specialty items from receipt to use in a procedure, as well as automate replenishment and patient charging processes.

### What Munson Healthcare achieved:

**25%**

*greater charge capture on the same procedure volume.*

**\$250K**

*per year reduction of expired inventory.*

**\$400K**

*per month reduction in supply cost billing corrections.*



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**“We are able to capture charges more efficiently and track inventory levels more accurately, both of which allow our clinical staff more time to focus on patient care.”**

**Flavius Toader**

*Director of Supply Chain for Munson Healthcare*



## SUCCESS SNAPSHOT

# Regional U.S. Health System

**This 450-bed regional healthcare system<sup>2</sup> in the Northeastern U.S. is a nationally recognized leader in cardiovascular and orthopedic surgical care.**

As part of a cath lab and interventional radiology (IR) lab renovation project at its main facility, the health system wanted to improve inventory management, gain high-value item traceability, maintain usage visibility at the point of care and optimize its labor force.

They leveraged a fully integrated and automated inventory management system with RFID tracking for high-cost items and RFID two-bin Kanban for general supplies. This solution automates replenishment and patient charging processes, facilitates UDI capture and provides data on supply chain performance for standardization and savings initiatives.

### What the health system achieved:

**\$1.35M**

*savings in the first year, including:*

**\$350K** up front in inventory savings and **\$24K** per year moving forward.

**\$660K** in expired product recovery.

**\$210K** annual savings from charge capture recovery and case costing optimization.

**\$80K** savings by redirecting clinicians' time to the patient.

**\$40K** savings through reduction in supply chain labor.



**"One of the key reasons for selecting and implementing Tecsys' inventory management system was to reduce the amount of waste due to expired product, which we estimated at \$950,000 annually. The post-implementation results were dramatic and immediate with a reduction of over \$660,000 in the first year."**

*Director of Supply Chain for the health system*

# Perioperative

## Supply Situation

**Supply costs in this area are one of the largest expenses a provider has to absorb. Furthermore, it is an extremely complex environment to manage being a supply chain of its own within the broader hospital supply chain, with a huge variety of products (e.g., instrument trays, loaner trays, kits, general supplies, implants and tissues, etc.).**

Some of the most expensive items are consignment products (aka trunk stock) that supplier representatives walk into the operating room (OR). As with costly items in the cath lab, supply chain has limited or no visibility to consignment products in the OR, such as implants. This presents significant challenges to contract compliance and inventory management.

While physician preference cards provide a basis for what supplies a surgeon will require for a procedure, it is extremely difficult to maintain their accuracy. As a result, OR staff often find themselves scrambling to find missing products. In other cases, supplies picked for a case go unused, having to be returned to inventory, reprocessed in sterile processing, or in some cases, wasted with the healthcare organization absorbing the cost.

Supply management and documentation processes in the perioperative area are still largely manual and disjointed, with nurses keying data into various systems post-procedure.

With the wide variety of products used in the OR, nursing staff struggle to capture all of the information required for EHR documentation, product tracking (e.g., UDI, registries), billing and replenishment.



## SUCCESS SNAPSHOT

# Mercy

Mercy<sup>6</sup>, one of the top five largest U.S. health systems, serves millions of patients annually through its 44 acute care and specialty hospitals (heart, children's, orthopedic and rehab), with more than 750 physician practices, 300 clinic locations, eight outpatient surgery centers, one virtual care center, 40,000 co-workers and more than 2,000 Mercy integrated physicians.

To address changing revenue models, the health system needed a comprehensive assessment of perioperative performance and a plan to maintain the viability of this critical service line, which generates 42% of its revenue.

Mercy implemented a clinically integrated inventory management solution that connects with the hospital's clinical and financial systems in order to provide various stakeholders with the necessary data and workflows to optimize patient care delivery.

### What Mercy achieved:

## \$21.2M

*estimated savings expectation, including:*

**\$2.4M** in supplies by automating inventory management.

**\$4.7M** in supplies by improving inventory utilization.

**\$13M** in supplies by optimizing charge capture with products documented at POU.

**\$480K** in labor by improving preference card accuracy and eliminating time spent pulling and returning unnecessary supplies.

**\$167K** in labor by optimizing cycle counts with technology and reducing labor needed for this task.

### Additional benefits:

**12%**  
*reduction in OR turnover time.*

**71%**  
*reduction of serious reportable events.*

**37%**  
*increase in clinician satisfaction.*

**284%**  
*improvement of preference card optimization.*



**"The missing piece of the puzzle was a truly consolidated software platform that marries the clinical with the back office, eliminating those performance gaps that exist when one system ends and the next one picks up where that one left off."**

**Betty Jo Rocchio, MS, RN, CRNA, CENP**  
*Senior Vice President and Chief Nursing Officer, Mercy*

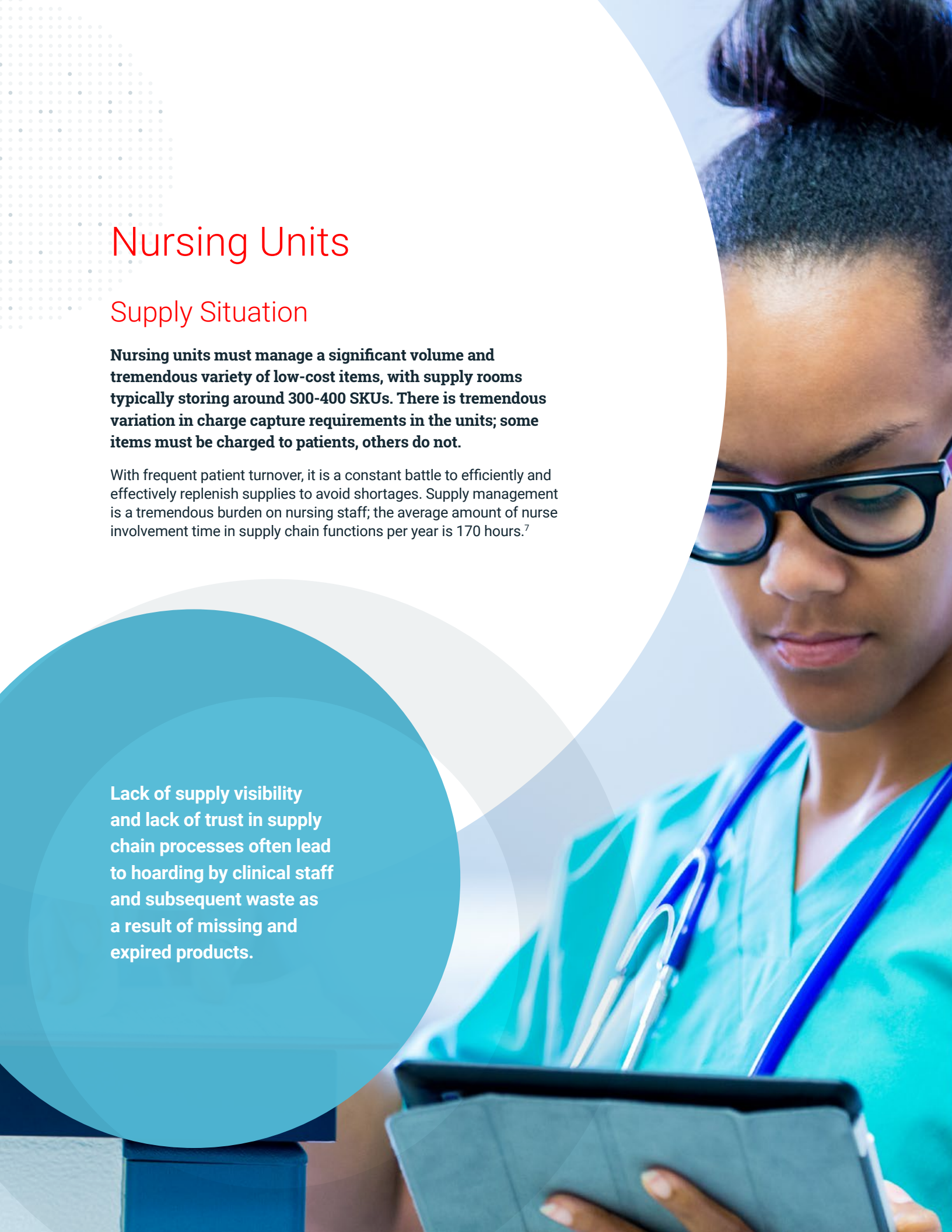
# Nursing Units

## Supply Situation

**Nursing units must manage a significant volume and tremendous variety of low-cost items, with supply rooms typically storing around 300-400 SKUs. There is tremendous variation in charge capture requirements in the units; some items must be charged to patients, others do not.**

With frequent patient turnover, it is a constant battle to efficiently and effectively replenish supplies to avoid shortages. Supply management is a tremendous burden on nursing staff; the average amount of nurse involvement time in supply chain functions per year is 170 hours.<sup>7</sup>

**Lack of supply visibility and lack of trust in supply chain processes often lead to hoarding by clinical staff and subsequent waste as a result of missing and expired products.**





## SUCCESS SNAPSHOT

# Concord Hospital

**Concord Hospital<sup>®</sup>, a regional medical center in New Hampshire, is the second-busiest acute care hospital in the state, with 295 licensed beds and 238 staffed beds.**

The hospital's goals were to recover valuable resource time, optimize inventory levels and increase supply usage visibility as it relates to internal efficiencies. Concord also needed a way to support its newly adopted low unit of measure (LUM) model for supply replenishment.

The solution was an enterprise-wide inventory management platform that is integrated with existing workflows and IT environments. It leverages an RFID-enabled two-bin Kanban system for general supply documentation and replenishment, and RFID and barcode technology to track and trace high-cost supplies and consignment items. Through this platform, all products are tracked from receipt into the hospital through utilization in a procedure.

### What Concord Hospital achieved:

**37%**

*less time spent by nurses on supply chain activities.*

**5,800+**

*hours returned to clinical care.*

**30%**

*reduction in on-hand inventory value.*

**\$150K**

*annual savings from reduction of wasted stock (e.g., expired, damaged, obsolete items).*

**53%**

*reduction in materials management time spent on replenishment.*

**25%**

*space savings.*



## SUCCESS SNAPSHOT

# State-owned 11-Hospital System

**A state-owned, not-for-profit integrated health care system<sup>9</sup> with 11 hospitals in the Southeast U.S.**

As part of a complete supply chain transformation project of its new heart and vascular facility, the health system was looking to improve supply chain and inventory management on all nursing floors and diagnostic and treatment procedure space.

The hospital system implemented a unified, electronic and automated inventory management solution that is closely integrated with clinical, supply chain and financial systems. This provides the various stakeholders with the data and workflows they needed to optimize patient care delivery.

### What they achieved:

**\$1,752,500**

*in total hard gains value within 16 months, including:*

**\$339,500** in savings through inventory optimization and carrying cost reduction.

**\$761K** in loss avoidance (expired and waste reduction).

**\$652K** in additional revenues through improved supply usage capture.

Over five years total gains will exceed **\$5.8M**.

## Start Your **Journey to Savings**

Like the health systems and hospitals highlighted in this e-book, you know you are wasting supplies and money when you lose control over them after they enter clinical care areas. Clinicians are there to care for patients, not to manage inventory, but, somehow, we have foisted this tremendous burden on their shoulders.

It's time for your supply chain team to achieve end-to-end supply chain clarity and control. In doing so, you can save your organization significant money, while enabling clinicians to focus on patients.

**Speak to a healthcare supply chain expert**



## Sources

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## About **Tecsys**

Since our founding in 1983, so much has changed in supply chain technology. But one thing has remained consistent across industries, geographies and decades – by transforming their supply chains, good organizations can become great.

Our solutions and services create clarity from operational complexity with end-to-end supply chain visibility. Our customers reduce operating costs, improve customer service and uncover optimization opportunities.

We believe that visionary organizations should have the opportunity to thrive. And they should not have to sacrifice their core values and principles as they grow. Our approach to supply chain transformation enables growing organizations to realize their aspirations.



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