InVita
HEALTHCARE TECHNOLOGIES

How Missing Data Undermines Tissue & Implant Supply Chain Decisions

What if hidden opportunities for savings were displayed right on your dashboard?

Why is Tissue and Implant Supply Chain Management So Challenging?

- Disparate and incomplete data sources
- Lack of integration for real-time data
- No automation of processes
- Paper-based/ patchwork hybrid systems
- Manual data entry and human error
- Hundreds of thousands of implant types
- Changing requirements and regulations

Questions to consider as you read this content

- How would the lifecycle of your tissue and medical device implants be transformed—through increased visibility for inventory intake/outtake, consignments, recalls, explants, and warranty claims?
- How would you gain real-time access to enterprise-level visibility and data from the lifecycle of your tissue and medical device implants?
- How would you gather the data you need from across your hospital or health system to procure the right product mix at an optimal price?
- How would every stakeholder along the tissue and medical device implant supply chain benefit from having access to the data that could decrease costs or risk?

Consider This...

Each day, implant supply chains are hemorrhaging money due to loss, waste, missed opportunity, unfavorable contracts, compliance issues, and process inefficiencies, to name a few. Sources estimate nationally, hospitals and suppliers lose up to $5 billion annually on implantable devices due to waste and ineffective supply chain processes.

Why?

Supply chain managers and other stakeholders only had access to SOME of the data they needed when making important decisions...
until now.

Waste accounts for nearly one out of every four dollars spent on healthcare in the U.S. Due mainly to administrative complexity and fragmentation, waste can negatively affect supply chain efficiency, clinical workflows, and staff productivity.

Breaking Down the Numbers

Waste adds up to staggering numbers. One InVita customer had been writing off $200,000 in tissue grafts each year, as one example.

Additional Costs Negatively Impacting Hospitals	
$25,000	Potential for missed warranty credits
$11,000	Fine for each incorrect claim under OIG regulatory guidelines
20 minutes	Average time to receive and document implants
800 hours	Average time spent annually to manage implants manually
15 product recalls	Average number of recalls per week that are managed manually

Software Provides the Solution

Software can encompass the full implant lifecycle and close all gaps—in data, time and visibility. Integrated and connected, data can be aggregated from needed sources, smartly organized, and presented in a meaningful way.

Integrated data provides visibility at every stage so stakeholders have the time to make informed decisions. With enterprise-wide analytics, managers of finance, procurement, supply chain, and compliance can be aligned in eliminating waste and identifying cost-saving opportunities. And across an enterprise, managers can make a really big impact.

DID YOU KNOW

Implants represent up to 30% of a hospital's total supply chain spend and more than 50% of their cost of procedures.

If you want to reduce waste and recover resources, gaining 360-degree visibility is a good place to start.

Is your supply chain's data infrastructure optimized for cost savings?

Ask yourself:

- Are our analytics descriptive, diagnostic, predictive, and prescriptive?
- What are the cost implications behind hidden data?
- How much of our analytics rely on manual processes and are prone to human error?
- Are staff getting out of their workflow to find and retrieve data?
- Can we make actionable insights using current analytics and hospital inventory performance?

Status Quo Creates Data Gaps

Many hospitals use a system that combines software with manual processes. Some systems focus only on implant-related inventory and management without including components like real-time receipt of product orders, consignments, recalls, explant procedures, and associated warranty credits. Others may use only manual processes that tie up staff resources and often are the source of errors in the system due to manual data entry.

Given the volume of implant types that hospitals and health systems are charged to manage, it's easy to see how gaps in data can arise, making the entire process a drain on resources. Eliminating data gaps requires a central environment where data is aggregated and stakeholders can see across the supply chain and implant lifecycle for the hidden cost savings that exist. Also, to have the information and time to avert the culprits that add costs or compliance issues across the implant supply chain.

Why?... Data and Analytics enable hospitals and health systems to:

- Avert costly waste due to expiration and loss.
- Leverage the power of a multi-hospital system to ensure maximum implant usage efficiency.
- Identify supplier risks for high usage items and gain opportunities to consolidate suppliers for high usage items.
- Leverage real-time usage trends.
- Identify implant recalls automatically to ensure patient safety measures and maximize warranty credit potential for compliance and credit funds back to the facility.
- Leverage workflow efficiency across the implant lifecycle to quickly document explant compliance requirements and alert clinicians of necessary actions at the time of recalls.

Software is the Solution... and the right solution will help supply chain managers make better decisions.

By implementing a solution that does the heavy lifting, automatically gathering relevant, timely information, consolidating data, and making data-driven recommendations, supply chain managers can spend more time taking action instead of crunching data.

The main benefit of using a software solution is increased enterprise visibility within the supply chain. Increased visibility through analytics makes unseen opportunities come to light in terms of cost, productivity and competitiveness. Automatically capturing data makes it possible to see the opportunities and provides a roadmap for greater cost savings and improved compliance across the supply chain.

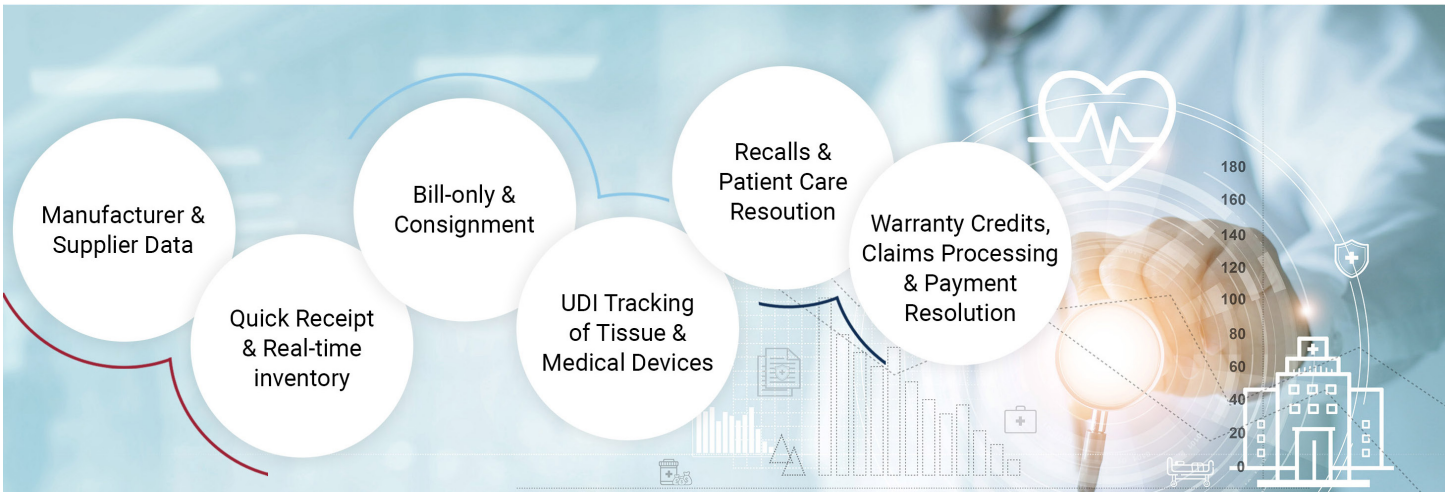
The right software solution will help supply chain leaders to:

- Ask the right questions to make business decisions
- Understand the analytics value chain
- Choose the right data and metrics
- Make inferences using statistics
- Act on their findings using insights
- Tell their story with their data

Ask yourself...
if an investment in software—equivalent to the cost of just one pacemaker—could prevent loss due to expiration on all tissue and medical devices... would you make that investment?

Introducing Implant360

The industry's first implant management platform that provides complete and real-time information to optimize implant supply chain efficiency and maximize lifecycle cost savings across an entire health network.



Implant360: one, integrated cloud-based platform for implant-explant-warranty claim visibility at all levels

- Full lifecycle—from implant to explant to warranty claim
- Full implant supply chain—for tissue and medical devices, including expiration dates, warranty tracking, real-time usage rates, and meaningful usage and cost-saving trends
- Integrated Delivery Network (IDN)—across all participating facilities in the health network

For the first time, decision makers can view opportunities and align on priorities to reduce implant spend, reduce expiration, waste and loss, reduce supplier risk, consolidate suppliers, and more. It's the only platform to bridge data across the lifespan of tissue and device implants, including inventory consignments and removals, recalls, explants, and warranty credits.

With seamless data flow and the interfaces that drive automation and accurate data, this scalable and collaborative environment becomes the engine for refined operations and efficiencies. Both hospitals and enterprises have a center point for product usage and activity for every department so product levels, staffing, and resources can be leveraged with predictability and allocated intelligently.

InVita is the only company that does this in one, consolidated platform, driving the value hospitals need for their specific supply chain systems.

Breaking Down the Results

Imagine having all the data you need to maximize implant savings across all supply.

Potential Benefit for Hospitals & Health Systems	
298,000	Unique device (UDI) products tracked
20,000	Unique tissue products tracked
70% reduction	In waste due to expiration and loss
70-90% reduction	In time spent to receive, track, inventory and reconcile products
3.2 million	Product recalls identified and communicated

Implant360: analytics at every level—local, regional and enterprise

The key to controlling cost is getting all the data you need in one place and then making sense of it.

InVita's Implant360 gives supply chain managers a single platform that aggregates information from the sources that help to illuminate future waste prevention opportunities, documents dollars saved, and compares savings over time. Underpinning every point throughout the implant-explant lifecycle is a robust analytics engine that continually monitors the addition and movement of implants around the hospital or across a health system.

With Implant360, monitor product usage information while supporting the identification of:

- Supplier Risk (too few suppliers) for the given usage rate of a specific product type
- Supplier Consolidation (too many suppliers) for the given usage rate of a specific product type
- Trends that indicate when spend could exceed contracted levels
- Purchase Opportunities based on product usage
- Inventory Stockouts and reallocation of items to where they are needed

Actionable Insight

Supply chain managers often need to identify supplier risk within a hospital and across the IDN. This means looking at tissue and medical device spend by supplier, calculating the share of spend by supplier, and then looking for items where the spend is highly concentrated. Imagine repeating this process for thousands of items across multiple facilities and then ranking them based on risk.

That's a lot of time dedicated to number crunching (and away from other priorities). Or, supply chain managers could click on a report in Implant360 to have all of this information right at their fingertips.

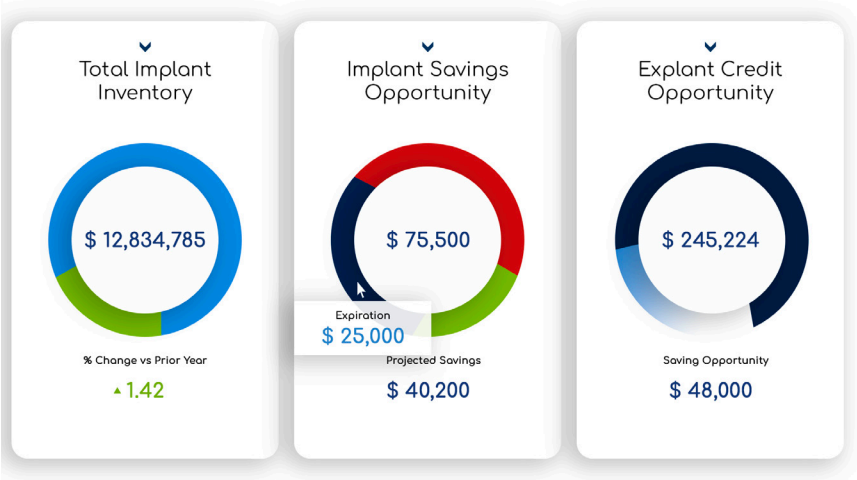
Implant360 provides:

- A full implant supply chain and lifecycle view of real-time information
- Analytics for assistance in making future decisions to improve the overall performance of the enterprise
- Transparency of data and analytics for all users based on their role

The Implant360 Dashboard

InVita's Implant360 dashboard is like no other. This powerful data visualization tool allows supply chain teams to:

- Start high level and dig deep to pull out key insights
- Tell a story with data
- Get more context into supply chain issues



Dashboard Analytics

Descriptive Analytics—understand WHAT is happening now or what happened in the past. Implant360 allows supply chain teams to look historically and use data to decide where they should be focusing their efforts and conversely identify and prioritize supply chain areas that require less attention.

Diagnostic Analytics—understand WHY things happened in the past. Implant360 gives supply chain teams the tools to understand why certain inventory trends are happening.

- Why is stock running low or in abundance at one of my hospitals?
- When should I order more based on usage?
- How many should I order and of what type?
- How many have we been using over the last month?
- At the current usage rate, how many products are at risk of not being used before their expiration date?

Proactive Analytics—be proactive in FUTURE decisions based on data and historic trends. Implant360 empowers users to identify products that exceed a percentage expired threshold over a certain period of time. These features give hospitals opportunities to be able to plan for future purchases based on the usage rate.

Prescriptive Analytics—decide what is the best course of action for your supply chain at ANYTIME. Things do change on the fly, and when that happens, what exactly is the decision you should make? Implant360 helps managers make important decisions based on actual data, trends and current opportunities.

Implant360: Elements of the Right Solution

- **Automate processes and share information simultaneously and in real time**
  - Foundational to supporting patient safety measures and compliance requirements.
  - Track tissue and medical device implants, providing a two-way audit trail.
  - Automatically identify product recalls and maximize warranty credit processing.
- **Close information gaps (end-to-end lifecycle from implant to explant to warranty claim)**
  - Dependent upon the fluid movement of information.
  - Provides stakeholders with the real-time status of inventory relative to the day's procedures, transfers, and receipts of new products.
  - Platform for proactive actions to return the best outcomes.
- **Broaden transparency for all stakeholders**
  - Vital to spot opportunities across the supply chain and gain broad usage analytics.

- **Digitally manage chain of custody**
  - The manual entry of UDI into hospital records frequently results in incomplete data and errors.
  - Data should seamlessly integrate with manufacturers' databases, as well as EHR and MMIS systems, to automate inventory receipt and chain of custody tracking.
  - By automating this process, hospitals can reduce errors, optimize inventory, improve compliance, and enhance supply chain performance.
  - Optional barcode scanning and RFID storage cabinet integration adds a greater level of efficiency, accuracy and security.
- **Present enterprise data**
  - Identify supplier risks for high usage items and gain opportunities to consolidate suppliers for high usage items.
  - Aggregate data using real-time usage trends.
- **Provides full operational control**
  - Avert costly waste due to expiration and loss.
  - Leverage multi-hospital (enterprise) data to ensure maximum implant usage efficiency.
  - Improve process efficiency to quickly document compliance requirements and alert clinicians of necessary actions at the time of recalls.

Key Takeaways to improve implant supply chain operations

1. Tissue and implants represent up to 30% of your hospital's total supply chain spend and more than 50% of your cost of procedures. Even a small change in these percentages would bring a huge impact to your bottom line.
2. Implant supply chains hemorrhage money daily due to loss and waste because decisions are being made without complete information, created by broadening visibility across the supply chain.
3. Manually gathering, consolidating, and analyzing data across every tissue and medical device within a hospital or across an IDN before making decisions is a significant challenge for supply chain managers.
4. The key to eliminating data gaps and controlling cost is getting all the data you need in one place and then making sense of it.
5. Stakeholders must be able to see areas across the implant supply chain to be able to see potential cost savings and risk.
6. Gaining 360-degree visibility of the implant-explant-warranty credit lifecycle is an excellent place to start if you want to reduce waste and recover cost savings and resource benefits.
7. InVita's Implant360 gives supply chain managers aggregated information directly from the sources that help to illuminate future waste prevention opportunities, documents dollars saved, and compares savings over time.

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InVita Health provides chain of custody software technologies for complex medical environments including tissue, implant, blood, forensic, and community care environments. Our solutions optimize supply chains, sample tracking, and visibility across blood and plasma operations, the tissue and implant lifecycle, and environments spanning DNA and forensics. InVita's solutions support increased compliance and cost control, reduced risk, and improved patient and public safety outcomes.

For more information, email us at products@invitahealth.com, call 904-288-5999, visit www.invitahealth.com, or connect with us on Twitter and LinkedIn.