Foundation for Success: **Wellstar Health System's Journey of Continuous Supply Chain Improvement**

CUSTOMER STORY

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About **Wellstar**

Organization

Wellstar Health System is one of the largest and most integrated healthcare systems in Georgia with 10 hospitals, 10 emergency departments, 329+ medical office locations, 11 cancer centers, 90+ rehabilitation centers, three hospice facilities, two senior living centers, 35 imaging centers, 18 urgent care locations and five health parks. It is the only health system with a network of Level 1, Level 2 and Level 3 trauma centers in metro Atlanta. Wellstar has more than 24,000 team members – including 6,000 nurses and more than 3,000 physicians and advanced practitioners – providing compassionate, high-quality care.

10
Hospitals

11
Cancer centers

35
Imaging centers

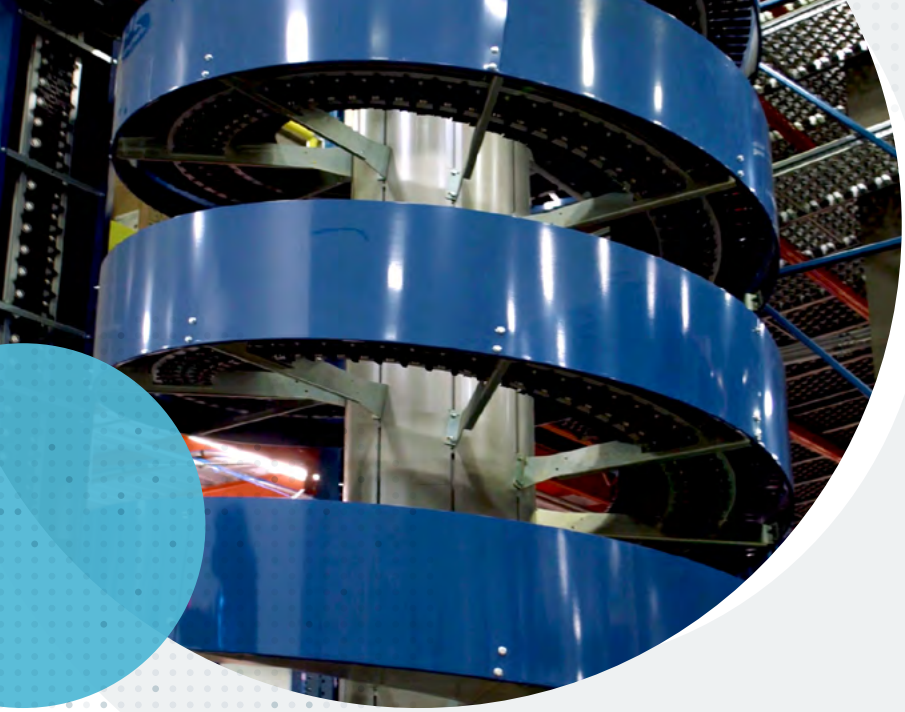
24,000
Team members

Adam Flood

Executive Director, Supply Chain

Wellstar Health System

Adam Flood is the Executive Director of Supply Chain at Wellstar Health System in Lithia Springs, Georgia. With a background in Business Management from Rasmussen College, Adam has transitioned from a successful career in hospitality to spearhead transformative changes in healthcare supply chain management. Under his leadership, Wellstar has seen significant enhancements in operational efficiency and strategic adoption of advanced technologies, positioning the health system at the forefront of supply chain innovation. Adam's initiatives have drastically improved productivity metrics and streamlined processes, making substantial impacts on service quality and cost reduction.



Executive summary

Wondering where the healthcare supply chain is headed next? Look no further than Wellstar. The health system's executive director of supply chain, Adam Flood, has spearheaded a comprehensive supply chain transformation, marked by a strong team culture, cutting-edge technologies and data-driven insights.

Believing that "automation is where healthcare is trending" and the drive to stay ahead of this trend, Flood and his team are deploying cutting-edge automated technologies – from automatic identification and data capture (AIDC) to autonomous robots – throughout Wellstar's consolidated service center (CSC). These automation initiatives are supported by a robust foundational supply chain execution technology provided by Tecsys. The Elite™ software platform enables seamless integration, efficient data management and streamlined operations across the CSC.

And this strategy is working: they have significantly enhanced the efficiency and accuracy of Wellstar's supply chain operations, elevating the quality of service provided to clinical customers, while reducing costs and waste. This includes a 220% increase in picking and packing productivity, a 99% fill rate for stock supplies, and a 30% decrease in cost per pick.

Follow Wellstar's transformational journey to achieve end-to-end supply chain optimization, from procurement out to supply delivery, including lessons learned and best practices for other healthcare supply chain leaders.

Setting the stage

"Healthcare doesn't take days off – there's always a need for service."

Adam Flood

In 2013, Flood began his career at a healthcare supply chain management company based in Fort Myers, Florida. Starting as a materials handler on the weekends, he was promoted to second shift supervisor in three months where he was tasked with training his team on that organization's Elite™ Warehouse Management Software (WMS).

The following year, Flood was promoted to manage the organization's process improvement group within the inventory control department. Leveraging Lean management methodology and automation technology through Elite™ WMS and Elite™ Healthcare Supply Chain Management (SCM), Flood minimized repetitive manual tasks for greater process efficiency and team productivity.

In Flood's words, his experience there "stoked the flame" of his desire to run his own healthcare supply chain operations. Having gained significant experience and valuable skills in three critical areas of healthcare supply chain management – people, processes and technology – Flood was ready to make the move.

In early 2020, Flood had the opportunity to interview for a supply chain leadership position at Wellstar. The fact that Wellstar Health had implemented the Elite platform appealed to Flood and showed the health system's willingness to advance in its supply chain operations.

"Wellstar had implemented Elite™ WMS and I had seven years of experience with the software. That was a huge benefit to me and may have been one of my deciding factors for taking the position," Flood explained.

"Being adaptable, quick on my feet, and able to stay calm in stressful situations all helped when I joined Wellstar during the height of the pandemic."

Adam Flood
Executive Director, Supply Chain
Wellstar Health System

Charting the course

"Change was paramount to re-establishing what good looks like."

Adam Flood

Based on his previous work in a Tecsys ecosystem, and site visits to other healthcare distribution centers across the U.S., Flood recognized how greater automation could benefit Wellstar's supply chain, its clinicians and patients.

"Wellstar's supply chain couldn't continue to operate with manual processes and support all the growth it was experiencing," said Flood. "It was immediately clear that there was a need for more automation, so we began envisioning how we could move the needle on it substantially. Automation is where healthcare is trending and while we don't necessarily need to get in front of the trend, we must keep pace."

Upon accepting the position of Wellstar's Executive Director of Supply Chain, Flood began work on one-, three- and five-year plans with the goal to make a positive impact on the operation and the customers it serves. An important aspect of his planning was setting benchmarks to ensure his team was continuously improving.

1-year plan

Take a pulse of the operation and refine resources to ensure the "right pieces were in the right places," including personnel, technology and physical space.

3-year plan

Establish the foundational needs for automation and system integration that would enable data-driven processes and improvements.

5-year plan

Having established the foundational elements of personnel, technology, process automation, physical space, and data-driven insights, determine the path forward for using this foundation to drive further improvements in the years ahead.

Flood commented on the change management process: "I came in knowing there were some weaker links in the supply chain, acknowledging that some of those weren't going to survive the transition, but that change was paramount to re-establishing what good looks like."

Fortunately for Flood, his immediate leaders shared his opinion that supply chain optimization was key to the health system's success.

Objectives for success

“Automation, while always a moving target as technology continues to adapt, is vital to our success moving forward.”

Adam Flood

Culture

Elevate the culture of Wellstar’s supply chain operations, establishing the department as a “great place to work," including building a career ladder for staff members to grow within the supply chain organization.

Automation

Simplify processes, improve efficiency, reduce errors and lower costs through automation.

Customer service

Regain the trust of supply chain’s customers – the clinicians – through higher fill rates, stronger communication and more effective collaboration.

A journey of change

"Change takes time, which just so happens isn't a commodity we are afforded in healthcare."
Adam Flood

Flood began his journey to supply chain optimization by tackling some basic operational improvements, which he refers to as "warehousing etiquette." This included transitioning from forklift rentals to a leasing program that saved the health system $5k per month. They also switched from using open top dumpsters, which were emptied daily, to trash compactors that are emptied twice a week, saving $500 per week.

When next turning to more extensive improvements, Flood began facing the inevitable challenges of change management.

To gain buy-in among his team members for the transformation change he was planning, Flood not only shared his vision, but asked individual staff to share their insights on the challenges they faced. This went a long way in not only engaging the team, but also shaping the vision to meet their needs.

"When you engage your frontline team, the people most impacted by the changes, there is more of an acceptance of what is coming and feelings of inclusion and ownership," said Flood. "And if you put enough eyes on something, someone will see a better way of solving a problem."

Case in point: When presenting plans for a new inbound receiving module to health system leadership and the warehouse team, a new team member proposed an improvement to the design, which turned out to be, in Flood's words, "a brilliant idea."

"The team member had been here only two weeks, so we hadn't had the opportunity to get his input previously, but it completely changed our vision of the project," Flood explained. "It just goes to show how the individuals who will be impacted by whatever solution you are implementing sometimes have a better handle on the situation than you do as a leader."

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Key achievements and impacts

Since joining Wellstar in 2020, Flood has truly transformed all aspects of the health system's supply chain operations through initiatives and technology solutions aimed at improving productivity, delivering enhanced customer service, and driving out costs and waste.

Purchasing

Flood led Wellstar's transition from its legacy Lawson enterprise resource planning (ERP) system to a Workday ERP system. This change, while challenging, has streamlined purchasing processes in the health system's consolidated service center.

In parallel, Flood led the deployment of Tecsys' Elite™ Healthcare Supply Chain Management solution, which integrates seamlessly with the Workday ERP system. Flood commented on the benefits of Elite™ SCM in providing end-to-end visibility of all physical inventory assets across Wellstar's supply chain network and real-time analytics.

"The Elite™ SCM implementation was significant because it changed how the purchasing team does their day-to-day work. They now have forecasting, demand planning and other capabilities that they use to better serve our clinical customers. We have seen our fill rates for stock supplies climb to above 99% and that's where they need to remain."

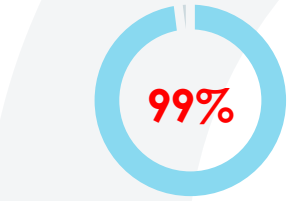
According to Flood, while many point to the COVID-19 pandemic as the height of supply shortages, in his experience, the post-pandemic environment has been more challenging across the board.

"During the pandemic, it was tough to get PPE; now it is hard to get everything due to raw goods shortages and manufacturing challenges," said Flood. "Out of the 4,000 stock keeping units (SKUs) we carry here, I would argue we have to bring in substitutions for 20% of them."

Despite the challenges, Wellstar is operating at a "healthy" 12 inventory turns, meaning 30 days of product is rotating through and out of the health system's supply chain.

"I give all the kudos in the world to the purchasing team and what we have been able to provide them in terms of technology as the reasons why we have been able to sustain such high numbers," Flood added.

To further enhance clinical customer service and ensure clinicians have the products they need when they need them, Flood established a customer service desk in the CSC to serve as a resource for requisitioners throughout the health system.



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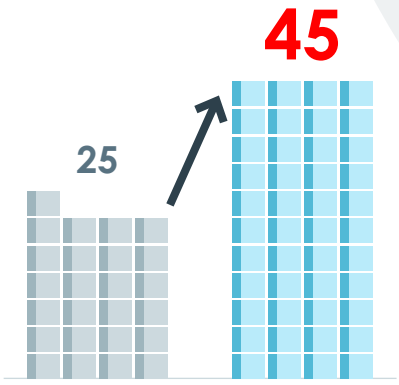

Warehouse management

During Flood's first week with Wellstar, he reconfigured the bulk area of the health system's CSC because it was the only place from which supplies were picked at the time.

"We nearly doubled productivity from 25 to 45 lines an hour just by reorganizing our supplies in the warehouse so that staff members weren't traveling nearly as far to fill orders," he explained.

Flood also collaborated with operations leaders and applications specialists in Wellstar's IT department to better harness the functionality of Tecsys' Elite™ WMS.

"Based on my previous experience with Tecsys and other healthcare supply chain organizations, I recognized we were not using the Elite™ WMS to nearly the potential that exists," said Flood. "Reconfiguring the system and teaching the team how to utilize it went a long way in helping us overcome that challenge."

Flood also established an inventory control team in Wellstar's CSC and trained them on using the Tecsys system to implement inventory classification for daily cycle counts.

"By having the inventory control team in place, we can regularly cycle count and provide daily metrics to show how accurate we are with our inventory and how well we are managing our supplies," Flood commented. "This has the potential to eliminate physical inventories for us in the future – which require floor-to-ceiling counts of our entire inventory and a shutdown of operations – and create a clearer picture of our inventory regularly so we can identify any potential issues that arise."

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Receiving

To enhance efficiency and manage the increased volume of supplies, Flood implemented a delivery scheduling system for the warehouse's inbound operation. This system streamlines the process of receiving supplies, ensuring that critical items are processed and distributed in a timely and organized manner.

Currently, Flood is at the forefront of constructing an inbound receiving module, a groundbreaking development in healthcare distribution. This module is designed to capture detailed tracking information and package metrics, significantly improving dock-to-stock time and accuracy in package handling. The integration of motorized conveyors to streamline the processing of non-stock receipts is a testament to Flood's forward-thinking approach.

"The inbound module is intended to streamline our non-stock products, which is anything we don't carry here at the warehouse," Flood explained. "It features a robust scan tunnel that has dimension and weight capturing capabilities, along with tracking number capture to adequately dispute discrepancies with FedEx and UPS."

The inbound module captures receipt of items with timestamps, allowing Flood and his team to calculate the time it takes from product receipt to customer delivery. It also drives receiving staff to comply with the first-in, first-out process as opposed to them selecting which products to receive first based on personal preference.

Flood explained how they are using the module to integrate inbound and outbound processes:

"Before this module, we were putting packages onto pallets and at the end of the time period, usually dictated by when the trucks are departing, someone had to manually crank up that pallet, take it to the other end of the building, and marry it up with the truck that is leaving."

"With this module, we have a conveyance that will take the packages from the rear of the building all the way to the front and tie them into our existing pick modules. To my knowledge, there are no other healthcare operations using this capability where inbound and outbound are tied together."

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Picking and packing

Flood spearheaded the design and implementation of dual, two-story pick modules, a strategic move that has revolutionized throughput and waste elimination. Featuring conveyance with flow rack shelving, supplies are loaded from the back and flow to the front. A CSC staff member can remain in one location to pick items, and place them into shipping containers that travel on the conveyer.

To ensure proper supply sorting and routing of the containers, Flood and his team worked collaboratively with the provider of the equipment, an integration partner for the controls, and Tecsys for integration of the module with the WMS.

"This has been such a huge step for us because it has more than tripled productivity," said Flood. "When I got here, we were at 25 lines picked per hour and now we are over 80."

Additionally, Flood has introduced image-based shipping labels in the packaging process, reducing the time spent grouping orders by 35%. This simple yet effective solution has streamlined supply distribution to various facility areas, enhancing overall efficiency.

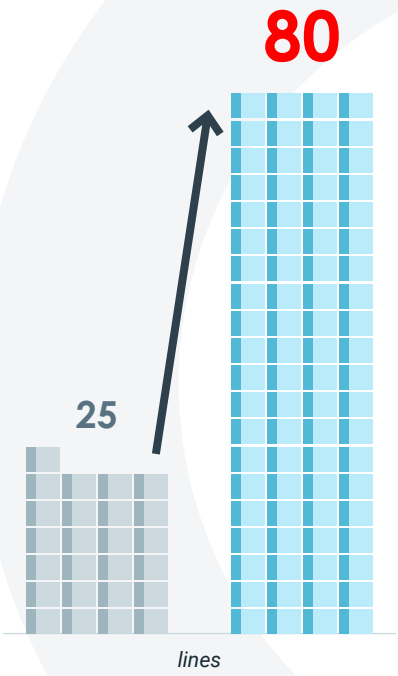
As a result of this work, Wellstar's cost per pick has dropped nearly 30%, from $2.75 to below $2.00. Flood and team are now working toward the goal of reducing it even further, down to below $1.50 per pick.

"Automation is once again at play here," Flood commented. "Part of that is the increase in lines we are producing with the dual, two-story pick modules. Our line counts have increased by 2,100 per day since I have been here, but the changes we have made have allowed us to keep up with that growth."

"There are also efficiencies and cost savings gained by our customers because if we fill more requests more accurately and on time, there is less work on their part to resolve issues," Flood added.

Flood has also incorporated visual cues into the packing process to improve customer service. The CSC uses shipping containers that have two flaps. When a staff member is actively picking for that container, the flaps are overlapped to signal the need to pick more items to complete the order. When picking and packing is completed, they interlock the container flaps to signal completion.

"If it ever gets to the end where it is sorted and the flaps are not interlocked, it is a visual cue for someone to open it up and figure out what is wrong," Flood explained.



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Distribution and transportation

As Wellstar increases utilization of its CSC for supply distribution to care sites, Flood has been working to streamline logistics processes. For example, as a container is routed from the pick and pack to the sortation area on the conveyor, a camera scans a barcode on the container label. The system is configured to automatically route it down the correct lane for distribution based on this scan.

By transitioning two facilities from pallets to flatbed carts, Flood has eliminated the need for additional equipment to move supplies. This change has simplified the logistics process, from loading supplies onto trucks to their final placement, reducing hours of rework daily.

Additionally, Flood introduced a new labeling system that provides detailed packing lists and critical information for customers. This has significantly increased accuracy and visibility of container contents, further enhancing customer satisfaction.

“We are also doing some work with our transportation department and delivery schedules to better service our 350+ physicians’ offices and outpatient centers,” said Flood. “We used to deliver to those sites daily, which was unnecessary, so we are now down to twice a week delivery."

Analytics and reporting

End-to-end automation and real-time digital data capture throughout Wellstar’s supply chain operations enables Flood and his team to surface actionable insights, perform advanced analytics and reporting, and track metrics against their key performance indicators (KPIs).

Flood and team have deployed digital dashboards throughout Wellstar’s CSC that provide real-time insights into KPIs in each production zone, such as receipts per hour and picks per hour. This initiative has greatly enhanced operational efficiency and decision-making.

Always looking for ways to further optimize processes and improve efficiency and accuracy, Flood and team will soon be rolling out individualized digital dashboards across all 16 zones with metrics specific to the staff member working in that zone.

“We will soon be able to provide our staff members with real-time data on their standard, per minute progress toward that standard, how much work they have completed, and how much is remaining,” said Flood.

Flood has also engaged a quality auditing team to help his team be more proactive in catching mistakes before their clinical customers are impacted by them.

“With continued staffing shortages in healthcare, we must be more adaptable and creative in the way we fill orders and ship supplies. Automation helps us bridge that labor gap.”

Adam Flood
Executive Director, Supply Chain
Wellstar Health System

“It’s about driving higher productivity without sacrificing accuracy.”

Adam Flood
Executive Director, Supply Chain
Wellstar Health System

Results to date

Flood has led a comprehensive supply chain transformation during his four years at Wellstar, backed by a positive team culture, industry leading technologies, extensive process automation and data-driven insights. The impact of his work has improved the supply chain team's efficiency and accuracy, which in turn has improved their quality of service to their clinical customers.

Supply chain optimization is also driving cost savings throughout Wellstar's supply chain. Improved productivity means fewer staff members can accomplish more work in less time, resulting in lower per pick costs. More accurate supply management informed by real-time data and analytics supports optimized inventory levels, healthy inventory turns and reduced expiry waste.

Additionally, Flood's foundational work supports the CSC's ever-increasing volumes as Wellstar expands its self-distribution for current care sites and newly acquired or built facilities.

220% ↑
increase in picking and packing productivity

35% ↑
reduction in time spent grouping orders

2,100 ↑
line count per day increase

30% ↓
decrease in cost per pick, from $2.75 to below $2.00

99% ↑
fill rate for stock supplies

Looking ahead

Flood's plans for Wellstar's continued supply chain optimization include advancements in the health system's current CSC and the construction of a second CSC to support newly acquired facilities. Here are three highlights:

- **Enhancements to Existing Pick Modules:** Introduction of cutting-edge enhancements to existing pick modules. This includes the integration of augmented reality (AR) glasses to improve picking accuracy and efficiency. Additionally, he plans to create interconnected zones for picking to further streamline the process and reduce wasted labor.
- **Autonomous Pallet Robots:** The deployment of autonomous pallet robots for picking in bulk areas. This innovative approach will revolutionize the picking process by bringing the robots to the pickers, thereby significantly reducing unnecessary travel and increasing the number of tasks completed per hour. This technology not only enhances efficiency but also aligns with the latest trends in automation and robotics in supply chain management.
- **Satellite Warehouse:** Wellstar's 2024 integration with Augusta Health System, comprised of a regional medical center, a children's hospital, and a medical college, presents new opportunities for optimization. To meet supply needs for these new facilities, Flood is transforming an existing building in Augusta, Georgia into a satellite warehouse approximately 180 miles from Wellstar's current CSC.

This project will involve setting up a new instance of the WMS, along with designing the rack layout, receiving and storage capabilities, and a picking solution tailored to supply the facilities. This expansion marks a strategic move to enhance the health system's distribution efficiency and regional reach.

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.

Speak to a healthcare supply chain expert

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