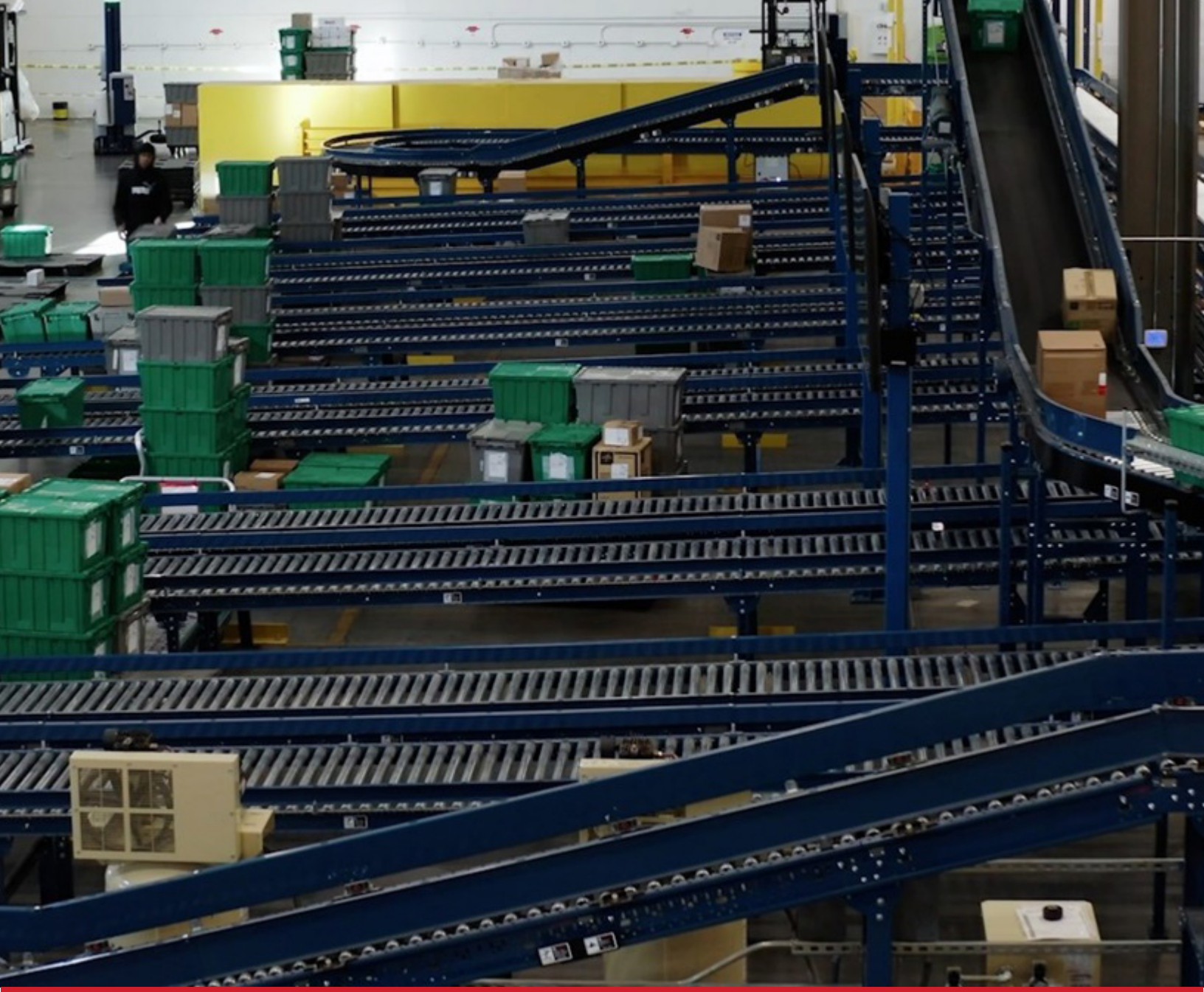

WELLSTAR HEALTH SYSTEM CSC: A SORTATION SOLUTION

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RAYMOND
CAROLINA HANDLING

WELLSTAR HEALTH SYSTEM CONSOLIDATED SERVICE CENTER: A SORTATION SOLUTION

As the largest and most integrated healthcare system in the state of Georgia, Wellstar always is in search of the best technology and processes for improving patient care. And that commitment extends to the system's Consolidated Service Center in Lithia Springs, Georgia.

Presently, 11 hospitals, 395 physician offices, 20 urgent care facilities and five health parks rely on Wellstar's centralized distribution facility for daily deliveries of medical supplies and other items to treat hundreds of thousands of patients each year.

The CSC receives 10 to 12 trailers of product each day, with thousands of supplies flowing through the facility, including 3,800 stocked and 1,200 cross-docked items.

When Adam Flood joined Wellstar as executive director of operations, material handling processes at the CSC were primarily manual, other than the use of forklifts to move pallets and handheld scanners for picking orders.

"One of the things that appealed to me to come here to Wellstar was that it was kind of a blank slate, or canvas, if you will," Flood said. "We wanted to find a way to use automation to assist our team as opposed to replacing team members. I had worked within a pick module prior and helped design and slot and lay that out. Taking a pragmatic approach to what our operation is and what we're trying to do, a pick module was the most sensible path forward for us."

Manual processes, space utilization and space availability were among the elements Carolina Handling engineers addressed in the design of an integrated automation solution at Wellstar CSC, according to Systems Engineer Jacob Smith.

"They had a very small picking area operated by just a few light picking operators," Smith explained. "There was a lot of open floor space that was consumed with stacks of pallets and product all over the place. They had storage racks that they used, but there was a lot of open floor space and a lot of potential to help automate and speed up their processes."

The facility also employed a large number of independent contractors using carts, walkie pallet jacks and reach trucks to pick and move items.

"Our productivity at that time was in the range of 25 to 30 line picks an hour. We knew that we needed to get that number up significantly, bringing in conveyance and automation to help us push the boundaries of what we can do efficiently."

- Adam Flood, Wellstar Executive Director of Operations

Phase one of the distribution center's transformation was installation of a multi-level, dual pick module and shipping sorter. Products are fed onto a gravity racking system from the back side of the modules where they then flow inside the module to picking operators.

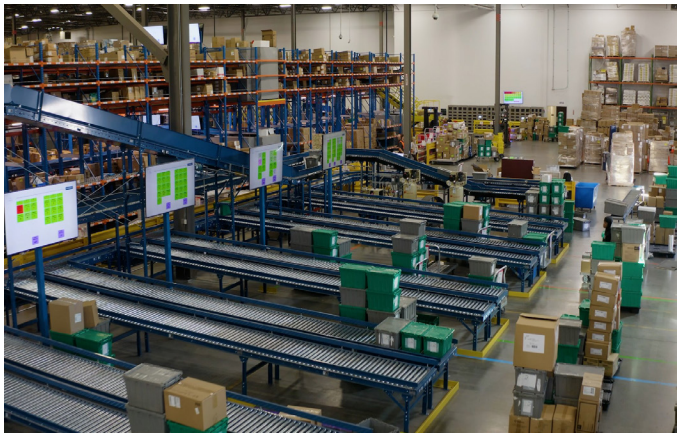
The picking process starts at the bottom level of the pick module where an operator receives an order to be fulfilled, Smith explains. An order label is printed and affixed to an empty tote which is placed on a centralized conveyor that feeds totes through zones of picking.

A scanner camera in each zone reads the label to determine if any items in that area need to be picked. If so, the tote diverts to that area.

Once product is picked from a zone, it then is placed back on the centralized conveyor that takes it to another zone. Totes travel up the spiral turn onto a mezzanine where it goes through two additional picking zones.

After all items for an order are picked, the tote travels through a final scanner which confirms that the order has been fulfilled. The tote then moves to a tie-in conveyor that takes it to the shipping sorter. A scanner on the shipping sorter makes a lane determination, with totes diverted to one of 12 shipping lanes.

An added feature of the pick module is an empty corrugated trash conveyor that takes empty boxes along a takeaway conveyor to a bailer.



Once the picking process is complete, totes move to a tie-in conveyor that takes them to the shipping sorter.

A scanner on the shipping sorter makes a lane determination, with totes diverted to one of 12 shipping lanes.

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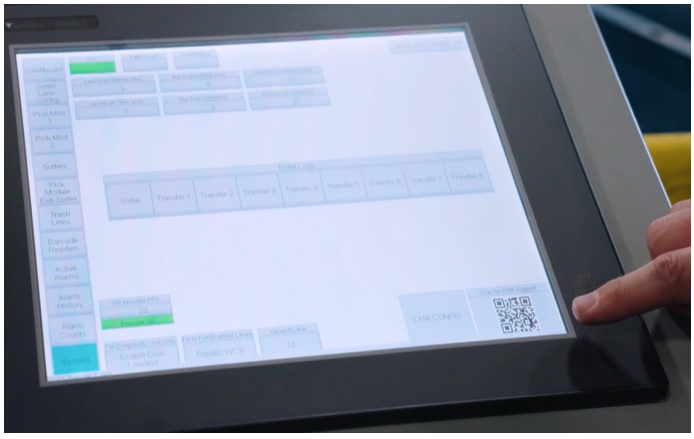
The Wellstar system features an empty corrugated trash conveyor that trnasport empty boxes to a bailer.

The Wellstar system also includes graphic user interface panels that allow operators to easily monitor throughput rates and troubleshoot system issues.



Graphic user interface display panels include a barcode that can be scanned for immediate service and support.

An added feature of the pick module is an empty corrugated trash conveyor that takes empty boxes along a takeaway conveyor to a bailer.

The system also includes graphic user interface display panels at several points throughout the pick module and sorter. The touch screens allow operators to view throughput rates, enable and disable sorter lanes and monitor trash lines.

Display panels also include a direct support barcode that, when scanned, allows operators to contact a Carolina Handling technician directly to report a needed repair.

The goal for the new system was to increase throughput from 25–30 lines per hour to 85–90 lines per hour, according to Wellstar's Flood.

"We are happy to report that, over the last six months, our numbers have actually lived between 90 and 105 lines an hour, so we actually exceeded the goal that we set. That is due to how our product is laid out, how efficient the conveyance has been for us and how dedicated our people are to working in an environment that is more accommodating to them and doesn't require as much movement and things of that nature that create waste for us."

- Adam Flood, Wellstar Executive Director of Operations

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PICK MODULE
GRAPHIC USER INTERFACE