How and why HCA Healthcare changed the way they manage medical equipment

Remember when COVID-19 began to recede—finally—and hospitals, at long last, started getting back to business as usual?

It was autumn of 2021. The Centers for Disease Control and Prevention had only begun planning to relax mask mandates and screening recommendations for healthcare workers. It would be another year before the CDC authorized those kinds of changes.

At 186-hospital, 2,000-site HCA Healthcare, the 2021 return to relative normalcy coincided with — or perhaps led to — at least one very specific reckoning.

"The pandemic really showed us the depth of our dependency on medical equipment," recalls Noel Hodges. "We saw how critical it is to make sure our nurses and other bedside caregivers have access to the medical devices they need — wherever and whenever they need them."

Hodges, who is CEO of supply chain for the health system's 11-hospital South Atlantic division, was tasked with leading the pilot of a shared service program across 46 HCA Healthcare sites. In many instances health systems across the country still depend on manual tracking of assets through static sheets like excel or a CMMS database that are basically just archiving 1000's of static records.

New times called for a reboot of HCA Healthcare's entire approach to medical equipment management. But how?

Stepping back to answer that question in depth, Hodges and colleagues quickly spotted a perilously weak link in the chain of command. Hundreds of individuals had a stake in knowing where medical devices resided at any given moment, but no particular department or team had responsibility for managing the assets as a single, unified fleet.

"We had lots of people doing lots of great work, but everybody was working in silos," Hodges explains. *"No one had clear business ownership of equipment management. So our goal from the beginning of this project has been to improve equipment availability for our nurses and other caregivers."*

Real-time location offers an every-time solution

After easily winning consensus on that goal, the shared-services pilot leadership group formulated a technology-based strategy. HCA Healthcare's experts in IT, supply chain and biomedical technical services, together with Hodges and specialists from the group purchasing organization HealthTrust Performance Group, settled on real-time locating systems — RTLS — as the go-to technology for the job. HCA Healthcare had dabbled in RTLS in the past. But, as Hodges remembers it, those efforts had slowly but surely petered out.

"If you don't have a business owner—you simply install a technology and don't support it — it's not going to give you the outcomes you desire," he explains. "So when we approached our post-COVID equipment management initiative, we said, 'We're going to bring all the key stakeholders to the table, and we're going to set out clearly defined roles, responsibilities and ownership.'"

That's what they did. Next, with the broad stakeholder input serving as a framework and RTLS identified as the technology of choice — over similar but distinct Radio Frequency Identification (RFID) — Hodges and team started looking at RTLS vendors and potential vendor partners. GE HealthCare's Encompass™ platform rose above the rest on the duel strengths of ease of use by caregivers and ease of installation for IT teams.

Meanwhile HCA Healthcare liked that Encompass would leverage the institution's investment in Wi-Fi infrastructure and work well with Bluetooth Low Energy to help optimize scalability.

Hodges counts among the early indicators of success HCA Healthcare's speedy installation of Encompass across those 46 sites (28 hospitals plus 18 freestanding emergency departments). The job was done in only 30 weeks — much faster than one site per week.

End-users 'excited, amazed'

Hodges reports that Encompass has won over many initial skeptics among end-users largely on the strength of its plug-and-play ease of use.

"Our caregivers immediately see where devices are located and get curious about how to go deeper with the app," Hodges says. "In hospital after hospital among those 46 in which we started, we've heard nurses saying, 'Wow, I can find an IV pump right on my iPhone with only two or three clicks.' Many aren't just excited. They're amazed."

That's an understandable reaction. Early in the pilot, Hodges remembers, a surgeon needed a particular device in the OR. The patient was on the table. Encompass came through, helping deliver the device to the surgeon in a matter of seconds. And the evidence of buy-in isn't merely anecdotal. In an internal survey, some 80% of 500 HCA Healthcare nurses and other bedside caregivers indicated they found Encompass easy to use or very easy to use.

Meanwhile Hodges and fellow members of leadership are leveraging the technology for its data analytics capabilities. "We can pull up maps of our hospitals and analyze where assets have traveled so we can spot trends and patterns," he explains. "This helps us optimize planning for future decisions around device management."

It's a new era

Equally high on HCA Healthcare leadership's list of returns on investment in Encompass: saving money in the operating budget that would otherwise have been spent on device rentals or replacements.

"When you can't find something that you really need for patient care, the easiest path is to spend money to get it," Hodges says. "You rent until you find what's missing from where it's needed. Or even worse, you just buy a new one."

This might not be so bad if the missing device dropped off the edge of the earth. But medical equipment tends not to just disappear. It gets stashed, hoarded or otherwise moved out of sight.

"In the past we often ended up buying devices that we already had more than enough of," Hodges says. "That was a terrible waste of time, effort and money. One of our biggest wins in this project has been driving out a lot of operating expenses in equipment rentals and re-purchases."

He's not exaggerating. HCA Healthcare's internal research shows Encompass and related efforts in equipment management, a 34% cut in equipment rental days and a 60% boost in requests filled with existing assets. Plus devices are now recovered and/or returned to a facility at the rate of two to three devices per day.

⬆ **60%**
in requests filled with existing asset

⬇ **34%**
in equipment rental days
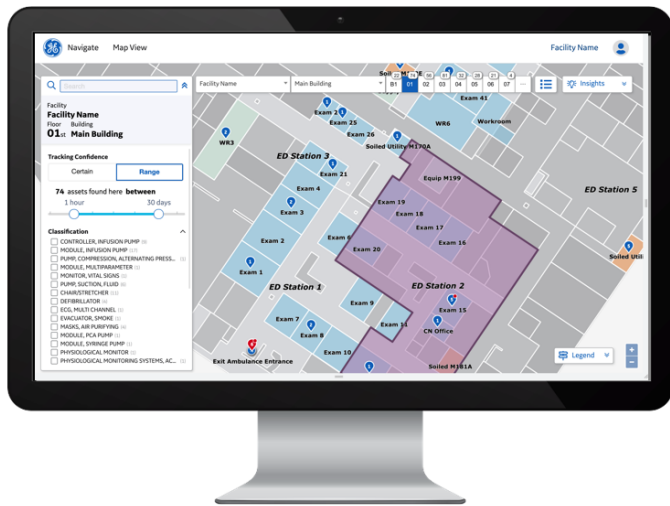
Navigate Snapshot

Wins to come

HCA Healthcare stakeholders as well as outside observers should watch for RTLS use cases to expand, possibly exponentially.

"Encompass is really a backbone platform. You can add a lot of tasks to it," Hodges points out. He says HCA Healthcare leaders in facilities management and plant operations, to name just two departments, are looking at non-medical assets that might be tagged and tracked to HCA Healthcare's advantage.

In addition, HCA Healthcare might look for ways to steer patients, families and guests through the vast mazes that are unavoidable in many large hospitals.

Hodges pauses before suggesting there are probably some potential use cases that, to date, nobody has thought of. "We're looking forward," he says, "to finding out what those might be." The Encompass platform continues to evolve to meet emergent needs.

→ To learn more about GE HealthCare's Encompass platform, or to book a demo or request a quote, click here.

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