Hartford HealthCare’s Bed Management Hub Improves Operations by Easing Overcrowding, Enhancing Access

By Whitney McKnight

An innovative bed management “hub” is providing Hartford HealthCare patients with improved access to care and streamlining resource logistics across the Connecticut-based care network.

Seen as the solution to easing the chronic emergency department overflow at Hartford Hospital—the system’s tertiary and trauma care center—and potentially as a vehicle for boosting revenues across the network of community hospitals in the Hartford HealthCare system, which are consistently operating below capacity, the Hartford HealthCare Care Logistics Center serves as a remote nerve center.

Housed in an off-site building, the center is a bustling facility where a panoply of screens display the location and availability of the system’s inventory of more than 1,800 beds, the number of patients awaiting transfer from emergency rooms or elsewhere, and even live feeds of hospital helipads. A team of 23 critical care nurses, a physician and other staff monitor the hub and triage patient transfers around the clock.

The center has implemented a single information system, Epic’s patient transfer module, to manage patient flow. The system allows the team to manage all the resources available at each facility (the most recent hospital to join the network, Charlotte Hungerford, is still being integrated into Epic and is expected to be online within the next two years). Staff members also use dashboards to monitor key patient flow metrics in near-real-time, including transfers, boarding times and ED and operating room queues. Staff even track air medical arrivals with a helipad video monitor, according to Jeff Flaks, Hartford HealthCare president and chief operating officer.

Since it opened in October 2017, the centralized hub has significantly improved the way patients are moved throughout the system, easing access to appropriate care, enhancing the patient experience and making better use of the system’s flagship Hartford Hospital, Flaks said, attributing much of its effectiveness to collocation.

Whereas previously it was difficult for logistics staff at different hospitals to coordinate their efforts, now a single team of logistics managers are side by side, communicating in real time and making quick and appropriate patient movement decisions. In addition, bringing all logistics functions into one has enabled staff to identify inefficiencies and create standardized processes. “We are dramatically reducing the number of patients that we wouldn’t have been able to accept there,” Flaks said.

More than 100 patients have been transferred to one of the system’s five community hospitals since the center went live, freeing up resources for those with the most serious illnesses and life-threatening injuries, according to Beth Ciotti, RN, Hartford HealthCare’s vice president of logistics. She and her colleagues are also keeping track of whether patients placed in one of the system’s acute care facilities ultimately end up in Hartford Hospital. So far, she said, this has not occurred.

Such streamlining also means care is delivered more quickly, said Ciotti. “In the past, there were probably five or six calls a physician would have had to make in order to transfer a patient, and who knows how long that would’ve taken,” she explained. Now it only takes one phone call into the center, and within minutes a patient is assigned an appropriate bed of their choosing.
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“I don’t think we can overemphasize the fact that patients always have a choice. We always explain the differences between the hospitals where we have an available bed and a doctor waiting to care for them, and then we ask where they would like to go,” Ciotti said, adding that all patient feedback received thus far has been positive, even among patients who have received care in a hospital they would not normally have considered.

To help educate patients, Ciotti and her team will begin working with the marketing and patient experience departments to create brochures describing the amenities of each hospital, including maps of where to find each campus’s cafeteria, ATMs, parking lots and gift shops, as well as a guide to what restaurants, banks and other retailers are nearby. “The sky is the limit from a concierge point of view,” she said.

The logistics center is expected to help increase not only health system revenues, but also patient experience scores. Said Flaks, “This will absolutely help. We are eliminating ‘dwell time’. We are treating our patients as special guests, because each transfer is being managed personally. We have people who follow up and are attentive when people leave their home market. We are dramatically increasing access to personalized, coordinated care.”

Developed in partnership with GE Healthcare, the logistics center is the system’s third iteration of centralized patient throughput. The first was an in-house, nurse-staffed, 24-7 center developed in 2007 to manage beds at Hartford Hospital. Soon after, a transfer function was added, serviced by one phone number. During the time the bed management system was evolving to what it is today, Hartford HealthCare underwent several mergers, working with GE Healthcare to integrate the campuses using the principles of Lean management. Without this cultural foundation, staff acceptance of the remote nerve center would have been harder, if not impossible, to achieve, Ciotti said.

“Lean brings so much to what we do. It eliminates waste and encourages teamwork. People are trained to think that way. It’s so much a part of our culture,” she said. “I think you could try to do something like this without Lean, but I don’t think it would be as successful because you’d have to be in the habit of already knowing how to address things from a standardized perspective.”

To date, there are no standard benchmarks for how long it should take to transfer a patient from the moment a call comes in to the center, although she expects there will be a range. While a heavy flu season has hobbled such data collection efforts, it has also helped prove the efficacy of the system. “Our beds are so full now, all the time. It’s like we’ve never seen it before, because of this year’s flu season. If this had happened last year, we would not have had this 360-degree view of all our open beds,” said Ciotti.

Although there was some apprehension among personnel about what might happen when each hospital gave up control of its bed management, the inherent transparency of a Lean culture helped ease fears. “We engaged our staff closely, and there was always staff input,” Flaks said.

According to Ciotti, the fact that the center is run and staffed largely by critical care nurses also helped get medical staff on-board. “What nurses bring to this is their clinical expertise. They are fluent in lab values, scans and diagnostics, basically any clinical term that is used. They speak the same language as the physicians or the other medical people who are calling.”

Future plans for the logistics center include managing patient movement through behavioral health, interventional, high-tech outpatient services and ambulatory care, according to Flaks.