St. Thomas Elgin General Hospital Improves Patient Flow and Increases Staff Efficiency with Vocera Voice and Vocera Messaging

St. Thomas Elgin General Hospital (STEGH), an innovative small hospital serving the community of St. Thomas, Ontario, Canada, committed more than a decade ago to two key initiatives designed to raise its standard of patient care. The two key initiatives were: their care providers would spend 80% of their time actually caring for patients, and every patient entering the emergency department (ED) who required admittance would be admitted within 60 minutes.

Achieving both these goals meant the hospital needed to improve its internal communication among its approximately 850 staff members as well as the technology in place to support that communication.

“We first learned about the Vocera® System a few years ago and started using it in 2007,” said Kathy Dinner, Support Technician – Information Services for St. Thomas Elgin General Hospital. “We recognized right away that the hands-free operation and wearability of the Vocera Communication Badges made perfect sense for us.”

Vocera Voice, and more recently Vocera Messaging, now play a vital role in STEGH’s entire communication infrastructure and in the hospital’s success at accomplishing key initiative goals.

Problems with Paging

Reducing ED admit-to-bed time to 60 minutes requires that patient rooms be cleaned and readied promptly—and that everyone involved in the process knows the status of rooms without having to spend time tracking down that information.

Previously, the hospital used a pager system to coordinate the preparation of beds for new admissions. When a patient was discharged from the hospital or transferred from one department to another, the unit notified registration and triggered the electronic process of patient discharge/transfer that sent a message from one application to another, which then sent a page to housekeeping with a message such as “410 Bed 2.” A housekeeper was then expected to go to room 410 and clean bed #2.
Unfortunately, however, housekeepers could not rely on the system due to intermittent connectivity issues. This disconnect meant not receiving messages on time or at all, and then there were times when the system required a manual update to display the bed as empty/clean.

With this inefficient process, there was no way for STEGH—with its 42,000 ED patient visits and 7,000 ED patient admissions annually—to achieve its 60-minute-admit-to-bed goal.

**Improve Room Turnover with Bed Optimization Integration**

STEGH replaced its overhead paging system with Vocera Voice and integrated Vocera with other technologies at the hospital, notably the Medworxx Bed Board bed optimization system (BOS). The BOS provides a data repository and graphical representation of all the beds in a hospital unit and the status of those beds.

“Now when a patient is ready to be discharged or transferred that information is entered into Cerner (STEGH’s ADT system) and interfaces with the Medworxx BOS, which triggers a message through Vocera to the housekeeping staff on that unit,” said Jen Hilt, Clinical Informatics Specialist. “Housekeepers receive the message on their Vocera wireless, wearable Badges, and they can respond verbally and instantly about that bed’s status: currently being cleaned, already cleaned, or on hold while other beds are being attended to.”

“Vocera is extraordinarily helpful for reducing our bed turnaround time,” said Hilt “Housekeepers receive messages in a timely manner and can prioritize their day according to discharge schedules. Plus, staff members no longer need to spend time searching the units looking for rooms with recently discharged patients and beds waiting to be cleaned, or checking to see if a bed is cleaned and ready for a new admission.”

“The use of Vocera transformed the workflow and processes for housekeeping throughout the hospital,” said Hilt. “Not only did the average bed cleaning time decrease, but the improved communication between housekeeping and the floor nursing staff made it easier for housekeepers to complete their other work during their shifts.”
Looking Beyond Bed Turnover

In addition to housekeeping, Vocera is used by the hospital’s entire nursing staff, the administrative staff, respiratory therapy, maintenance, and security.

“The changes in housekeeping workflow brought about by Vocera caused us to review other processes and standards at the hospital and to examine how we worked as an organization,” said Hilt. “We rethought everything, from nursing and respiratory therapy procedures to how our maintenance and IT staffs work.”

For example, STEGH now uses Vocera together with the BOS to better manage processes around patients in isolation because they’re resistant to antibiotics or are contagious. Important instructions can be recorded in the BOS and communicated immediately using Vocera Badges or Vocera Messaging, which allows users to send and receive messages and alerts using smartphones, web-based consoles, or other clinical systems.

“Our rules for patient discharges, as well as admissions from ED, have changed dramatically with Vocera, and everything just happens faster and more smoothly,” said Lee-Anne Hofland, Help Desk. Because nurses and other clinical staff spend less time on the logistics of patient movements in, out, and within the hospital, they have more time available for direct patient care—which contributes directly to STEGH’s other key initiative of maximizing the time clinicians spend at the bedside.

Patients have noticed the changes, as well. Faster admission-to-bed and discharge times—which end up decreasing the total length of stay—rate highly on patients’ opinions about the overall quality of the hospital and the care they receive, as does more attention from the clinical staff.

“If I’m a patient being admitted, a faster housekeeping time means I get into that bed faster,” said Hofland. “And, if I’m a patient waiting to be discharged, it’s quicker for me to get out of that bed and get back home.”

“Even knowing that the hospital has well-managed housekeeping processes contributes to patients’ confidence that they are in a ‘clean hospital,’” said Dinner.

“We love Vocera,” said Hofland. “We’re always looking for the next thing to do with the Voice or Messaging applications, wondering how we can use them to become even more streamlined and efficient, and figuring out how to make things better and better for employees and patients alike.”
The Vocera System is a proven technology that supports STEGH’s strategic care goals. Through streamlined communication and an integrated system, hospital caregivers have more quality time with patients—up to 80% of their time is now actually spent caring for patients, and the hospital achieved its 60-minute-ED-to-admitted objective.

ABOUT

St. Thomas Elgin General Hospital is a 166-bed facility providing comprehensive 24-hour coverage in internal medicine, surgery, obstetrics, pediatrics, anesthesia, emergency, and family medicine. The hospital has more than 42,000 ED patient visits and 7,000 ED patient admissions annually. It employs over 800 healthcare professionals.

The mission of St. Thomas Elgin General Hospital is to care for those who access their services while enabling patient participation in decisions about their care, and to proactively coordinate the patient’s smooth access to other health care services within the broader continuum of care.

The hospital seeks to support learning and continuous improvement in the delivery of safe, efficient, quality-oriented, and values-driven services.