

Hardin Memorial Health Accelerates Care, Improves Clinical Workflows and Boosts Patient Satisfaction

Hands-free communication solution helps decrease 'left without being seen' rate by 69.5%; improves HCAHPS scores 44.7%

Victims of a multiple-car accident arrived in the new emergency department (ED) at Hardin Memorial Health (HMH) in Elizabethtown, Kentucky. They were rushed into several different rooms where teams of clinicians provided critical care.

While providing hands-on care to a trauma patient in one room, a physician was asked to help treat a second critical patient in a room down the hall – at the same time. Around his neck he wore a Vocera® Badge, a device with which he could communicate hands-free. Speaking into the Badge, the doctor provided clinical guidance to the second patient's nurse while continuing to resuscitate the first patient. The fast communication and effective collaboration between clinicians is credited for both patients' survival.

Instant Communication for Fast-Paced Care Environments

In early 2018, HMH doubled its ED square footage and increased the number of exam rooms from 27 to 65. The expansion was a benefit for patients because of the added capacity. But it created a new communication challenge for clinicians who were accustomed to being at closer proximity to each other.

"The ED is a hospital within a hospital," explained Steve White, Assistant Vice President of Operations at HMH. "With the expansion, people became more dispersed and shoulder-to-shoulder communication went away. We also became one of the busiest EDs in the Commonwealth of Kentucky."

Hospital leaders needed a solution to keep care team members connected in the much larger ED. They knew the smartphone approach was not the answer because ED clinicians had already tried using a smartphone app from a Florida-based company, and adoption was low because it didn't adequately support clinicians' need for direct communication.

"A cumbersome smartphone is not conducive to a fast-paced environment like the ED," said Deanna Parker, Assistant Vice President of Emergency Services at HMH. "Our clinicians cannot afford to text and wait, or spend valuable time looking for one another."

When Parker and other hospital leaders evaluated the Vocera Badge, they knew the device was the communication solution the ED staff needed.

"To ensure staff remain connected, we looked at a variety of solutions like nurse call, overhead paging, smartphone apps, and more," said White. "They each addressed little pockets of communication, but not anything near what Vocera can do."

Using the Vocera Badge, care team members can quickly connect with individuals by name or role using simple voice commands like "Call Blue Team Nurse" or "Call Respiratory Therapist." They also use the Badge to activate specific emergency teams by saying, "Call Code Stroke" or "Call Code Blue." Each person assigned to those specific teams receives the call on their Badge and can act immediately. Care team members can exchange vital information with each other or request help without stopping care delivery or leaving the patient bedside.



Hardin Memorial Health

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“Implementing Vocera technology across our ED exemplifies shared decision-making, as implementation was driven from a department and staff level,” said Sharon Wright, MSN, RN, NE-BC, Vice-President of Patient Care Services and Chief Nursing Officer at HMH. “Prior to Vocera, our frontline ED nurses and physicians voiced concerns regarding gaps in communication.”

A Quiet, Seamless Experience Helps Healing

After implementing Vocera technology, staff and patients at HMH noticed another benefit: the ED was quieter and calmer.

“Because we can call specific teams and people through Vocera, we have been able to significantly decrease our overhead pages and eliminate the need for a herd of people that all need to drop everything to respond to an overhead page,” said Chris Stucker, BSN, RN, Director of Emergency Services at HMH. “We no longer need to disrupt other care team members or patients with noisy and disruptive paging because care team members can communicate directly with the right person, instantly.”

Targeted Broadcast Communication Improves Responsiveness and Safety

The ED team is using Vocera technology to enable care teams to effectively prepare for incoming trauma patients.

When an emergency medical service provider notifies the ED of the arrival of an ambulance transporting a patient, the team member receiving the notification can broadcast a message to a specific code team. This is done using a voice command such as “Call STEMI Team.” Each team member assigned to that code group receives the alert on their Vocera Badge and can quickly assemble to the right trauma room with the right supplies, so everything is ready when the patient arrives.

“Prior to Vocera, our clinicians had no other choice than to carry their smartphone in their pocket,” said Stucker. “They were missing calls and texts, and often couldn’t reply in a timely manner. With the Vocera Badge, we no longer have long gaps or disruptive delays in communication.”

Care team members at HMH no longer experience the frustration of not hearing a call or text message or calling and waiting for someone to respond. Employees also feel safer. They know that the touch of a button on the Vocera Badge will instantly alert security or safety personnel to their location and enable responders to hear what is going on. Because everyone in the ED uses Vocera technology, including vital ancillary staff, care teams always have access to the right person in an instant.

“Clinicians go into healthcare wanting to provide exceptional patient care,” said Parker. “Not having the right communication tools impedes their ability to communicate effectively, and subsequently impacts patient experience. Since implementing Vocera technology, we have seen tremendous improvement in communication, which has had a positive impact on patients, families, and staff.”

A Time and a Place for Smartphones

While ED clinicians and care teams prefer the Vocera Badge, department administrators prefer using the Vocera smartphone app. Staff members who do not provide hands-on care, but still need to connect and collaborate, want a solution that enables secure text messaging plus the ability to call by name, role or group. With the Vocera app, hospital leaders can easily send and receive notifications, access messages, and see who is on-call via their smartphone or desktop web console.

“The beauty of Vocera technology is that it truly allows you to choose the device that makes the most sense for your role,” explained Parker. “While smartphones don’t have a place in the ED clinical care setting, the Vocera app is a great option for those of us not directly delivering patient care. We can easily stay in the loop.”

Better Communication Leads to Better Patient Experience

Four months after deploying the Vocera system, the left without being seen (LWBS) rate in the ED dropped significantly. Between January and November 2018, the LWBS rate decreased from 4.6 to 1.4 percent — a 69.5 percent reduction. In May 2018, the hospital reported its highest monthly ED volume ever, and the LWBS rate was 2.2 percent, compared with 5.6 percent in May 2017.

Additionally, patient experience scores in the ED improved in several categories. Four months into 2018, the hospital reported a 3-point increase in its overall patient satisfaction scores, and HCAHPS scores for the ED related to “staff caring for patients as a person” improved from a Top Box score of 56.6 in 2017 to 63.4 in 2018 — a 12 percent increase. Perhaps the most impressive improvement was in HCAHPS scores related to “doctors informing patients about treatment” in the ED, which jumped from 53.3 in December 2017 to 77.1 in May 2018; representing nearly a double growth rate.

“Along with measurable outcomes, there have been notable improvements in qualitative results,” Parker said. “Nurses and physicians collaborate more easily, which strengthens relationships and improves the overall working and healthcare experience.”

Stats at a Glance
69.5% drop in left without being seen (LWBS)
44.7% jump in ED HCAHPS scores related to “doctors informing patients about treatment”
12% improvement in ED Top Box HCAHPS scores related to “staff caring for patients as a person”
3 point increase in overall patient satisfaction scores in the ED

“Embracing the right technology enhances patient care and safety,” said Wright. “Since implementing Vocera, we’ve seen an improvement in staff and patient safety, overall department operations, and patient experience perceptions. Delays in care communication have diminished.”

Improving Collaboration Beyond the ED

Parker and team are exploring ways to improve care team communication and collaboration in other departments, too. Like many hospitals, HMH uses a different electronic health record (EHR) system in the ED than what is used by the inpatient departments. Because the EHRs are not connected, it can create some workflow challenges. For instance, when an ED patient is being admitted to the hospital and waiting for a bed to open. The patient is no longer listed in the ED EHR and is classified as an inpatient with a new attending physician in a different EHR system. When the inpatient’s newly assigned physician writes an order for pain medication or an antibiotic, the ED staff does not have visibility into the order. To ensure team members across the entire hospital are in sync and patient care is seamless, HMH plans to integrate Vocera technology in the ED with the inpatient EHR system. This interoperability will enable auto notifications from the inpatient EHR to be sent directly to Vocera devices worn by ED staff members assigned to specific patients.

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Rita Pardee, Assistant Vice
President of Surgical Services
at HMH

After seeing success in the ED and exploring potential benefits, the surgical services department at HMH is eager to also implement Vocera technology. "After learning more about the technology, we know it is the solution our OR staff needs," said Rita Pardee, Assistant Vice President of Surgical Services at HMH. "It is clear that Vocera technology enables seamless communication, which is something that is very valuable to us with every minute in the OR worth hundreds of dollars."



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