

# Case Study: Increasing Staff Efficiencies During Covid-19 Through Communications Technology



[leadingage.org/cast](http://leadingage.org/cast)

## Category:

◆ Staff Efficiencies

### About the Organization

#### Organization Name:

Hardin Memorial Health

#### Main Contributor:

Deanna Parker, MBA, MHA,  
BSN, RN, Assistant Vice  
President of Emergency Services

**Organization Type:** Short-Term  
Acute Care Hospital

#### Organization Description:

Hardin Memorial Health (HMH) is an integrated system of providers and facilities serving approximately 400,000 residents in 10 central Kentucky counties. The 300-bed hospital in Elizabethtown, KY, includes 270 acute care, 15 psychiatric, and 15 skilled nursing beds. The hospital has one of the busiest emergency departments in the state, serving the 10-county region. Additionally, HMH includes 50-plus outpatient facilities across the service area, including a cancer care center and an outpatient surgical center.

### Project Description

In the span of a few weeks, the COVID-19 pandemic changed the entire U.S. health care system and the way hospitals and other health care providers, including those in long-term and post-acute care, provide care. In preparation for patient surges, HMH mobilized people, equipment, technology, and resources to manage the virus. We also redesigned clinical workflows, altered operational protocols, implemented new ways to communicate with patients and families, and looked for ways to support the physical, emotional, and mental well-being of health care workers on the frontlines.

### System Type

Vocera Badge: A wearable, voice-controlled communication device.

### Implementation Approach

In 2018, we doubled our emergency department (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 in closer proximity to each other.

With the expansion, people became more dispersed, and shoulder-to-shoulder communication went away. We needed a solution to keep care team members connected in the much larger department. Smartphones were not an option because they are not conducive to a fast-paced environment like the ED. Our clinicians cannot afford to text and wait, or spend valuable time looking for one another.

Our leadership team and front-line staff evaluated and selected the Vocera Badge. The wearable, hands-free device allows care team members to quickly connect with individuals by name or role, using simple voice commands like “Call ED Charge Nurse” or “Call Respiratory Therapist.” We also use the Badge to activate specific emergency teams by saying, “Call Code Blue” or “Call STEMI Team.” 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’s bedside. We do not have to worry about gaps in communication, and while wearing personal protective equipment (PPE).

As one of the largest EDs in Kentucky, we changed our workflows and procedures to be well prepared for patient surges related to COVID-19. To safely and quickly separate and care for patients, we changed our emergency triage protocols. Our main hospital entrance became an ED-only entrance, where a clinician is stationed to streamline the registration

process and separate patients who have respiratory or flu-like symptoms. These patients are placed in private rooms, where clinicians use appropriate PPE and precautions. Because the Vocera Badge can be used under PPE, clinicians in isolation rooms can quickly and safely connect with other team members in the ED and triage entrance.

## Advantages to the Approach

The COVID-19 pandemic has changed how our ED staff communicate and collaborate. Effective communication is a fundamental requirement for any team, but with changes in triage and isolation processes, some staff members were suddenly separated from their teams. Thankfully, our wearable Vocera Badges enable team members to connect and collaborate in real-time, without needing to remove their PPE. This capability is an important advantage because it minimizes risk for contamination and helps preserve this valuable resource. Every time clinicians remove their protective gear, there is a risk of self-contamination. Hands-free communication is now an essential part of PPE.

The Vocera Badge also enables care team members inside the hospital to speak with people outside the facility. During the COVID-19 pandemic, visitors were not allowed. So, it was important to find ways to maintain the human connection for our patients. There were times when a family member would call to speak with a loved one in isolation, and they were able to speak with them via the Badge worn by the nurse in PPE.

## Outcomes

Hands-free communication simplifies clinical workflows, improves care team collaboration, streamlines throughput, speeds up response times, and increases patient and staff safety. During the COVID-19 pandemic, we discovered even more benefits of hands-free communication, such as minimizing the risk of contamination and preserving valuable PPE. Since implementing the Vocera Badge, we have seen significant improvement in our Left Without Being Seen (LWBS) rates in the ED. We also have seen our patient satisfaction scores increase related to communication with nurses and doctors. Here is a summary of these outcomes:

- ◆ 69.5% drop in LWBS.
- ◆ 44.7% jump in ED Hospital Consumer Assessment of Healthcare Providers and Systems (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.

## Lessons Learned

It is important to listen to the voice of clinicians and frontline staff. Actively listening and providing a culture of empowerment for nurses, physicians, and other members of the care team is key. Without open dialogue and trust, gaps in communication and processes can unknowingly continue and escalate into care team frustration. By proactively engaging clinicians and staff at every point in a new process, solutions can be quickly identified and implemented. Maintaining an open dialogue with staff also helps improve use of the technology. Be flexible, and continue to monitor and adjust workflows.

## Advice to Share with Others

There is a time and a place for smartphones, but using them with gloves and under PPE is neither. Not having the right communication tools impedes the ability of care team members to communicate effectively and safely, which subsequently impacts patient care and safety. I highly recommend empowering care teams with hands-free communication.

## Links to Additional Resources

- ◆ [Article: Local hospitals using hands-free device to communicate](#)
- ◆ [Podcast: Delivering Emergency Services in the Midst of a Pandemic](#)
- ◆ [Vocera Case Study: Hardin Memorial Health Accelerates Care, Improves Clinical Workflows and Boosts, Patient Satisfaction](#)