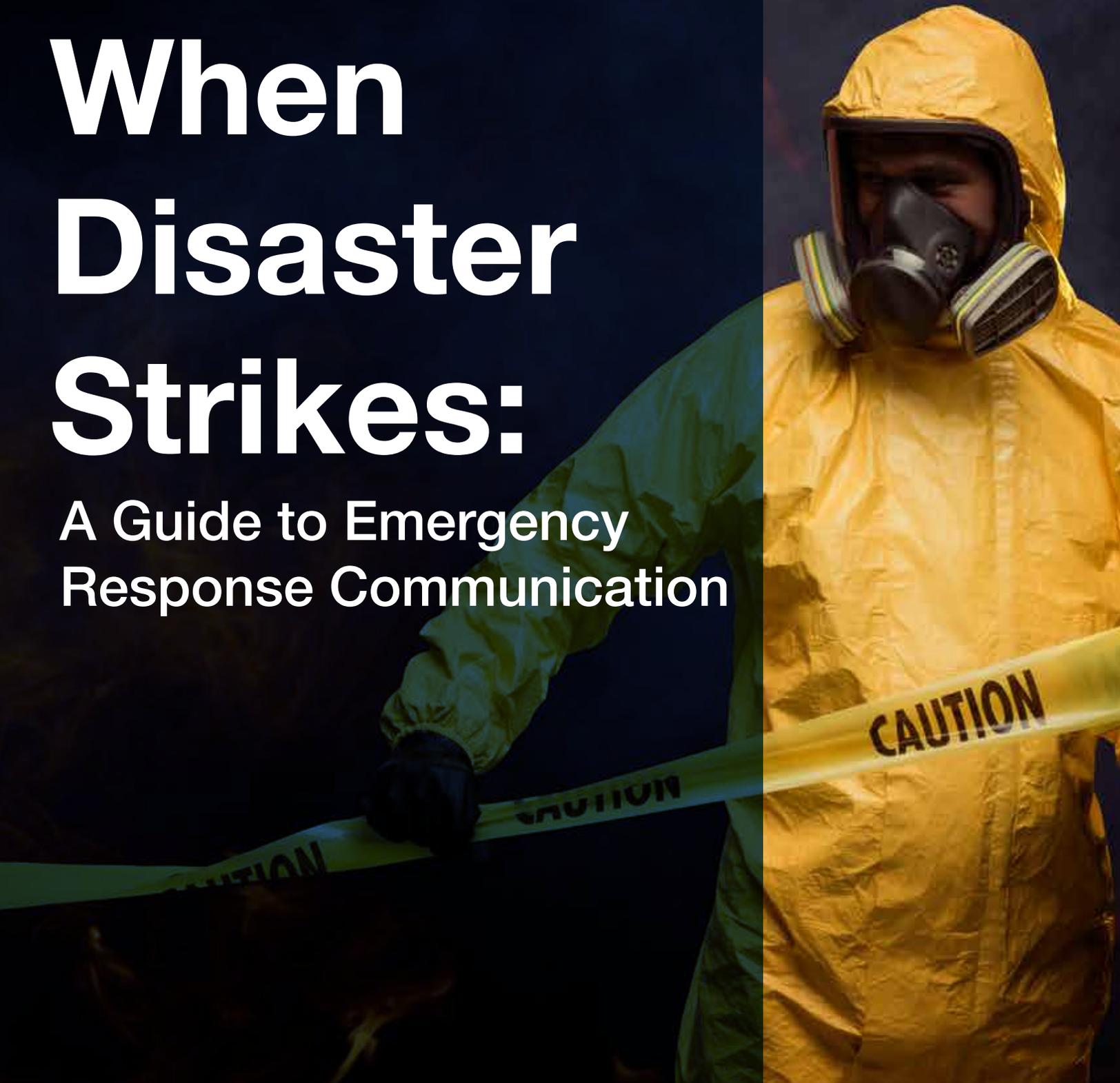




Mobile Heartbeat[®]
UNIFIED CLINICAL COMMUNICATIONS

When Disaster Strikes:

A Guide to Emergency
Response Communication



Introduction



When disaster strikes a community, hospitals have little time to respond. Whether a natural event like a tornado, hurricane or earthquake, or man-made, such as a shooting, hospitals and health systems are required to have processes and resources in place to accommodate and successfully treat much higher volumes of patients. But do these requirements leave hospitals exposed?

In October of 2017, 199 patients flooded into the emergency room at Sunrise Hospital and Medical Center in Las Vegas.¹ They arrived, victims of the largest mass shooting by an individual in American history, primarily via private transport, within 40 minutes of the shooting, flooding the hospital with

gunshot wounds, trampling injuries and other wounds resulting from the pandemonium.

As a Level II trauma center, the staff at Sunrise were as prepared as they could possibly be. They had the resources to triage and treat patients with gunshot wounds, but moving such a large volume of patients through the hospital in such a short span of time seemed a herculean feat.

Because of the tools and processes Sunrise had put in place, staff were able to accommodate the surge of patients requiring medical attention. These tools and processes included an enterprise-wide communication platform that could reach those on

the front lines, even from a remote location, and broadcast information to the entire hospital with the click of a button. By keeping everyone abreast of the situation, staff at Sunrise were able to focus on the most important thing: saving lives.

By the time the morning shift arrived seven hours later, they had admitted and provided care to each of those 199 people. By having an emergency preparedness plan in place—one that accounted for staffing, distribution of resources, communication hierarchy and more—Sunrise Hospital and Medical Center successfully navigated the challenges that commonly occur during emergencies, such as lack of personnel and resources or miscommunication.

This guide will take a closer look at the emergency management communication processes you already have in place for your health system, as well as the problems that can arise from these processes. We'll also discuss tools your health system can use to better prepare for disaster, and how you can implement these solutions. By accounting for these communication processes in your own emergency response plan, you can ensure that your healthcare organization will be ready for any emergency.



An emergency is an unexpected or sudden event that significantly disrupts the organization's ability to provide care, or the environment of the care itself, or that results in a sudden, significantly changed or increased demand for the organization's services ... A disaster is a type of emergency that, due to its complexity, scope or duration, threatens the organization's capabilities and requires outside assistance to sustain patient care, safety, or security functions.

—The Joint Commission

Existing Emergency Management Communication

In 2017, FEMA issued 75 disaster declarations across 35 states.² They estimate that some 25 million Americans were affected by natural or man-made disasters. With these emergencies affecting such a huge population of the country, it is essential that hospitals have up-to-date, modern and flexible plans for both clinical and operational workflows during and after critical events.

Beyond a plan of simply having a method of contact, TJC's requirements do not specify providing frontline staff or third parties with important status updates about the emergency, which means hospital leadership are the only ones required to receive notifications about the status of the emergency. This can leave a significant population of hospital employees in the dark about the critical event.

In 2017, FEMA issued 75 major disaster and emergency declarations across 35 states. They estimate that some 25 million Americans were affected by natural or man-made disasters.

The Joint Commission (TJC) issues specific standards to meet as an acceptable baseline in the event of generic disasters, and accreditation—as well as Centers for Medicare and Medicaid Services funding—is contingent on meeting these standards. They include accounting for everything from volunteer practitioners to evacuation needs to utility reserves, and at first glance, they seem comprehensive.

Specifically, TJC requires that all hospital leadership be reachable at all times before, during and after an emergency, and that leadership have some means of communicating with local, state and/or federal government, as well as law enforcement, patients, additional health organizations and media. They also require that hospital staff be notified that emergency response procedures have been deployed.³

Most hospitals have a Hospital Incident Command System (HICS) already integrated, but this methodology doesn't take advantage of the speed and ease of communication that comes with modern smartphone use—things like texting, VoIP calling, mass broadcasts or understanding where a user is assigned and whether or not they're online.

Your HICS provides incident command team members with a format for sending out initial information to hospital leadership, but it doesn't account for maintaining communication or reaching staff at the point of care. Your organization needs a solution for the continued coordination and collaboration throughout the emergency event, enabling continued updates and communication with context.

The Pitfalls of the Status Quo

While these requirements offer hospitals some much needed flexibility in emergencies on a continuum of severity, it's important to address the problems that can arise from an emergency operations plan that lacks more substance.

Many hospital employees can likely point out the first and foremost problem with these standards. Without notifying frontline staff about the status of an emergency, coupled with the stress and anxiety of a critical event, it's not unlikely that hospital staff will deviate from established protocol. Whether it's triaging patients inefficiently or mismanaging scarce supplies, clinical and operational employees should be brought into the fold during an emergency to avoid costly and sometimes critical problems.

There's another matter to consider when it comes to the chaos of a hospital during an emergency: Hospital leadership are likely not at the point of care with clinical and operational staff, which could very well lead to myriad problems in a critical event. They may not even be in the same building or campus. Perhaps there's a miscommunication about a shortage of IV bags, or the triage bays are over capacity and an overflow area is needed. Hospital leadership should be available to the end users in order to mitigate these kinds of problems before they crop up.

Many health systems underestimate the value of bi-directional communication in these situations. Not only is it important for hospital administration to communicate to those at the point of care—administrators need reliable and consistent updates from those employees. Frequently, clinical staff don't even know who they're supposed to be contacting to solve problems. Having a tool that makes it clear who they should be contacting, with a reliable method of contacting them would remove a lot of needless frustration and save precious minutes in a critical situation.

Finally, only including hospital leadership in your communication hierarchy can spell disaster on the public relations front. Developing a more robust communication strategy in your emergency operations plan can ensure that your organization is presenting a unified message in the face of an emergency.



Because disasters can occur at any time, the hospital must implement communication procedures immediately in order to stand ready to actively use and align with the system's emergency response procedures.

—The Joint Commision

Leveraging Communication & Collaboration

Having a comprehensive communication and collaboration platform can mitigate many of these problems. MH-CURE®, Mobile Heartbeat’s unified mobile platform, allows clinical and operational staff to find the right person without needing to know their name or phone number. With several communication and collaboration tools built into a single application, hospital staff and leadership can feel confident they’re able to keep doing their jobs, even in the midst of disaster.

“There is no way we could have communicated with the entire staff that quickly without [MH-CURE],” said Sunrise’s then-Chief Nursing Officer Kimberly Hatchel for HCA Today.⁴ “Rather than having to call the units individually, one alert summoned immediate help. Within two minutes, abundant help was headed to the ER. And when cellphone service was interrupted due to the volume of calls, [MH-CURE] kept staff in touch with each other. [It] saved lives that night.”

Below we’ve outlined some of the ways your hospital can leverage MH-CURE in order to maintain order and efficiency before, during and after an emergency. Your organization’s Incident Commander should explore the existing tools to determine how best they can deploy the response team.

Establishing a Virtual Command Center

Mobile Heartbeat has a multi-unit assignment feature that allows users to self-select into more than one unit. Being assigned to units enables users to view patients for those units, along with the Dynamic Care Team™ for each of those patients.

With MH-CURE, the emergency management professional can create a virtual unit called Incident Command Center (ICC), which is only visible to users that have been pre-defined by administration. Key stakeholders on the Incident Command Team will be able to assign themselves to this virtual unit in order to text and even send broadcasts just to the desired response team members. Designated staff members can assign themselves to the virtual ICC at the start of every shift to indicate that they are responsible in case of an emergency.

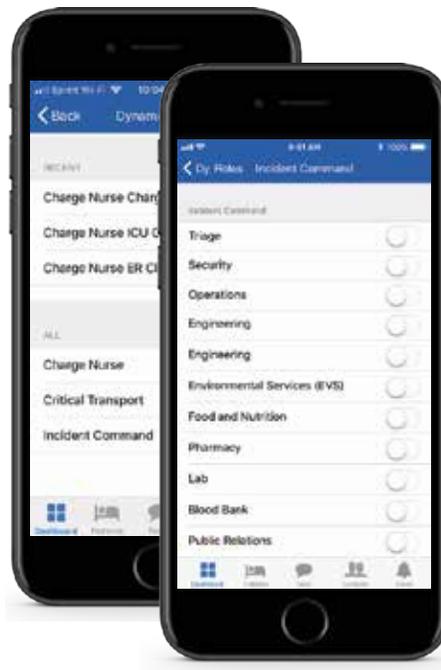
A virtual ICC isn’t the only important use case for multi-unit assignments. In the event of a disaster critically impacting a hospital’s ability to care for patients, the ICC can deploy a virtual unit for staging patients in the event of an evacuation. By moving patients into the virtual evacuation unit, all the relevant care team members can stay in the loop about patient needs and status.

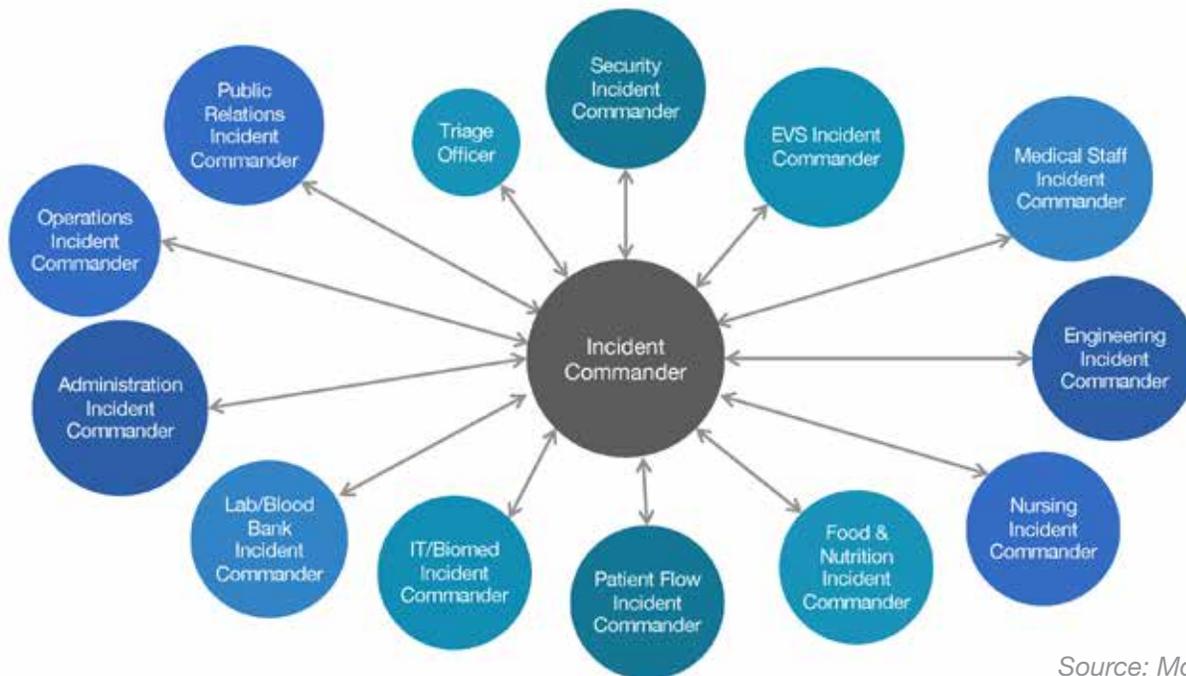
Dynamic Role for Incident Command Team

Another easy way to identify your Incident Command Officers is by creating a dynamic role. In our mobile platform, users can assign themselves to a temporary role. This is commonly used for roles like charge nurse or on-call cardiologist. By having your Command Officers assign themselves to their appropriate roles, other users can identify and communicate with them, without needing to know their names or phone numbers.

Examples of these critical roles include officers to lead the following groups:

- Triage





Source: Mobile Heartbeat

- Security
- Operations
- Engineering
- Environmental Services (EVS)
- Food and Nutrition
- Pharmacy
- Lab
- Blood Bank
- Public Relations

By leveraging dynamic roles for this purpose, staff on the front lines will be able to contact the appropriate Incident Command Officer without needing to know who they are or what their extension is.

Enhancing Critical Communication

All members of the Incident Command Team should be comfortable utilizing the more modern and effective forms of communication available to them. Here are some examples of methods that mobile communication platforms afford, along with their reach and response:

Instead of building a communication hierarchy that stops at the administrative level, consider expanding upon your hierarchy to include all clinical and operational staff. By including end users, you can remind all staff about hospital protocol during emergencies, better distribute and redistribute staff and supply resources as needed and present a cohesive front to the media.

- **1:1 Texting:** Reaches a single user, can receive response from single user
- **Group Texting:** Reaches multiple users and can receive response from multiple users
- **Broadcast:** Reaches multiple users, but users can only respond to the sender, eliminating reply-all issues
- **Calling:** Reaches single user, response from single user

That being said, the different communication types mentioned above are appropriate for use in different situations. At the start of an emergency, the Incident Commander should send a broadcast—as the

method with the widest possible reach—to all users, to announce the activation of a critical incident. The Incident Command Team then would continue to send broadcasts to pre-defined groups for:

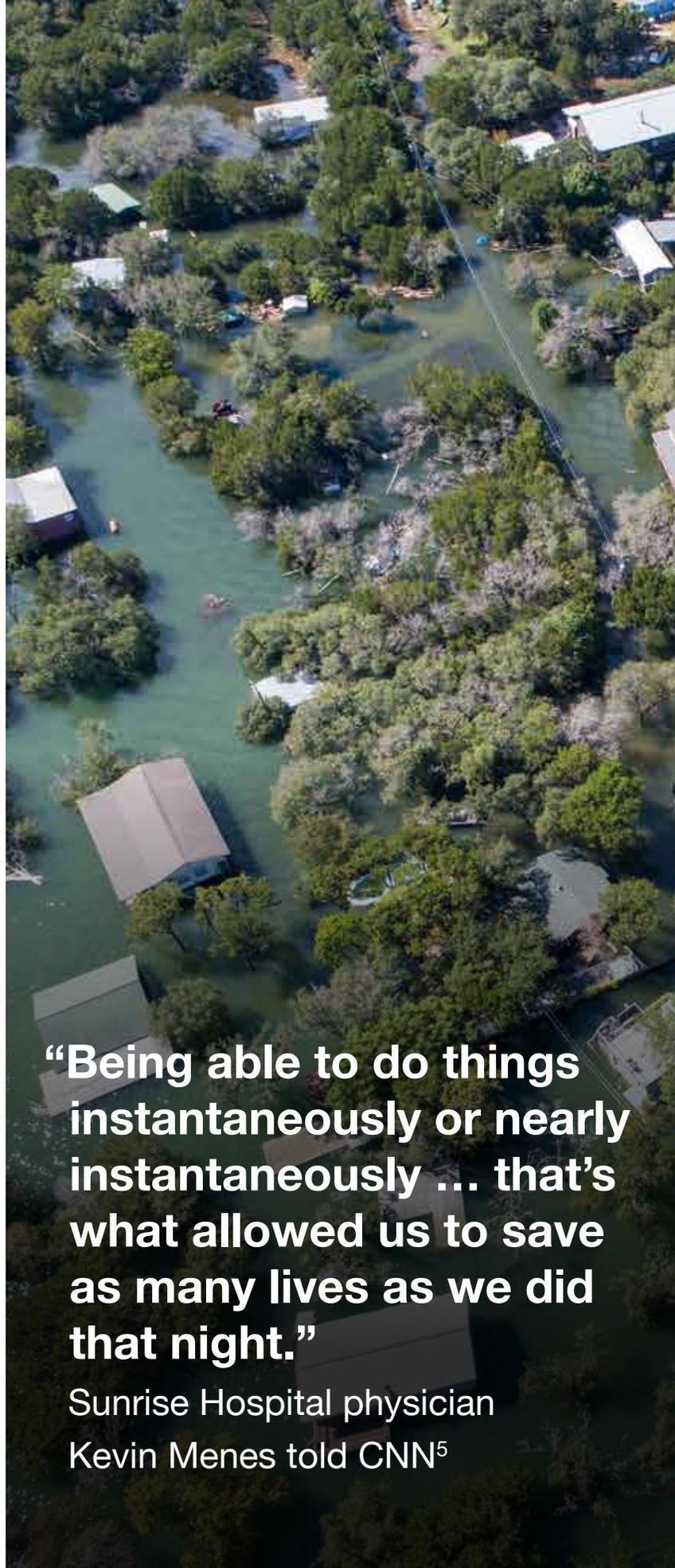
- Clarifying roles and responsibilities on their specific teams.
- Assembling smaller, specialized teams.
- Communicating changes and contingency plans.
- Identifying essential services.
- Informing teams of the locations of temporary units.
- Providing status updates about supply pars, shortages and the event itself.

Reinforcing Hospital Protocol

With MH-CURE's broadcasting feature, users can quickly and easily communicate important information to all relevant users. They get a notification on their mobile device or desktop that alerts them to the message. This is likely the easiest way for Incident Command Officers to communicate important information to the rest of their team.

Another tool included in MH-CURE is the ability to add customizable launch points. Through our CURE Connect™ Interoperability Program, you can add links (known as launch points) to reference materials and allow users to launch into separate apps, all without having to leave the MH-CURE ecosystem. Launch points are configurable by facility and role, enabling you to tailor which launch points are visible to what employees. This ensures that the right people can access the right content and tools. This feature proves especially important in critical situations, where access to preparedness material can mean the difference between efficiency and chaos.

The Incident Command Security Officer can leverage these launch points by including useful and common safety information, such as proper



“Being able to do things instantaneously or nearly instantaneously ... that’s what allowed us to save as many lives as we did that night.”

Sunrise Hospital physician
Kevin Menes told CNN⁵

staff protocol during a lockdown, as a launchable PDF for use in both drills and critical situations. If staff are able to familiarize themselves with hospital protocol right from their smartphone, at any time or place, they're more likely to know what to do when disaster strikes.

“Yes, you have disaster plans, you have disaster drills but nothing can really prepare you for any disaster,” Sunrise anesthesiologist Stephanie Davidson told HLN.⁶ “We deviated from our plan when we needed to, with the goal being, always take care of our patients.”

Creating an Iterative Process with CURE Analytics

After a critical event (or even just a drill for a critical event), you should always audit your communication data. CURE Analytics™, for instance, allows MH-CURE administrators to view communication and workflow data in a meaningful way. Use existing data to identify areas that can be streamlined or improved upon.

For example, were there any groups of employees who were out of the loop? How were staff talking about the emergency, and how many of them leveraged the launch point resources provided by the Incident Command Team? What were the most critically important connections for staff during the event in terms of communication? Were people clear on what they needed to do, or was there confusion?

The CURE Analytics data can answer these questions and more in order to help your organization expedite workflows.

Additionally, the Mobile Heartbeat Clinical Optimization Team offers communication and workflow consulting services, whereby you can identify specific areas for improvement, along with opportunities to expand your existing use to better leverage MH-CURE.

You can also solicit feedback from staff in order to gain a better understanding of what information

they're missing, protocols they aren't receiving or that are difficult to follow or understand, etc. This can help you continue to hone your hospital's incident preparedness plans.

There is nothing more important than saving human lives. When an emergency hits home, hospitals should not be left struggling to treat a surge of patients—it's up to hospital staff to prepare for the worst in order to save as many lives as possible and keep patients safe.

Incorporating a tool like MH-CURE into your healthcare organization's emergency plans and protocols provides for more than just a theoretical response. It provides a functional system that people can train on to respond quicker and more efficiently should an emergency happen. With a communication and collaboration platform in place, hospitals and health systems can develop and execute a more thorough and flexible strategy for keeping patients, staff and families safe during an emergency.



“We are connecting the right people in a more direct way than we’ve ever been able to do before. For a large medical complex like ours, it is literally a lifesaver.”

- Kimberly Hatchel,
HCA Today

Sunrise Hospital and Medical Center went live with MH-CURE five months before the mass casualty in Las Vegas back in 2017. Because they had a platform in place that allowed users to communicate with everyone in the enterprise, their hospital administration was able to prepare staff and gather supplies before patients even started arriving in the emergency room.

By leveraging tools that enable quick, clear and efficient communication, hospitals everywhere can be ready when the unimaginable happens.

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