

Disaster Preparedness: Strategies for Managing the Unexpected

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Communities nationwide face a seemingly ever-increasing risk of natural and man-made disasters.

Now more than ever, hospitals must be prepared to respond at a moment's notice to powerful storms, hurricanes, tornadoes, mass casualty events and other potential disasters.

This paper looks through the lens of three events in 2017 to discuss strategies that TeamHealth, one of the nation's largest integrated physician groups, utilized to prepare and respond to disasters affecting the hospitals they serve. We provide advice and lessons learned to help hospital leaders evaluate their clinical outsourcing partners' readiness to serve patients and support their hospitals when disaster strikes.

BACKGROUND

The Joint Commission requires that all hospitals maintain detailed disaster response plans that outline actions needed to navigate incidents such as fires or snowstorms that could impact the facility's infrastructure and ability to deliver care. These detailed plans must include strategies to handle situations resulting in power failure, loss of communication systems, and other impediments to normal operations. Regular drills allow facilities to simulate various disaster scenarios, practice their response and adjust their plans as needed.



As an example, consider that more than 60 percent of hospitals outsource their emergency department care to a third party and that the emergency department is the de facto “front door” of the hospital. During a mass casualty event, major storm or other disaster, the emergency department will likely become overwhelmed with casualties. As hospitals increasingly partner with third-party physician organizations to manage and staff numerous clinical services, hospital leaders must have confidence that their partners are prepared to respond to specific disasters.

According to a recent survey of emergency department doctors by the American College of Emergency

Physicians (ACEP), the vast majority of respondents said their emergency departments could not handle a surge of patients from a natural or human-caused disaster, and fewer than half said their hospital was only “somewhat” prepared.

Based on the ACEP survey results, hospital leaders may be wise to analyze the emergency preparedness of their clinical outsourcing partners in all outsourced departments (e.g., emergency medicine, hospital medicine, critical care, and anesthesia). Are your contracted physician groups ready to work closely within the hospital’s disaster response framework? What measures do they have in place to ensure adequate clinician staffing in anticipation of, during, and after a disaster? How would they manage a sudden influx of patients? What, if any, national resources and disaster response expertise can they offer to augment the hospital’s efforts?

PREPARATION IS KEY

If a disaster is preceded with sufficient warning such as weather reports, hospitals typically activate an incident command center that manages resources and response activities before, during and after the event. Similarly, some clinical outsourcing partners may have the resources and expertise in disaster response needed to operate their own command center or supplement and support the hospital’s efforts.

For example, in August 2017 when Hurricane Harvey targeted to make landfall in Texas, Houston’s Memorial Hermann Health System partnered with TeamHealth, their outsourcing group that manages many of the system’s emergency and hospital medicine departments, to combine their experience in previous national disasters and to activate a TeamHealth command center in a remote location away from the storm’s impact. The command center organized twice daily calls with physician leaders at each facility in the storm’s path to identify and take care of issues as quickly as possible. Knowing it might be difficult or impossible to travel during and after the storm, command center staff began identifying clinicians’ schedules, credentials and evacuation status to determine who could come to the hospitals and shelter-in-place to ensure adequate patient care throughout the storm’s lifecycle.

TeamHealth also established a command center at its national support center in Knoxville, Tennessee, when Hurricane Irma threatened Florida just weeks later. With more than 90 partner hospitals and healthcare organizations in the path of the storm, TeamHealth knew the importance of running storm preparation

and response from outside the hurricane’s path. The Knoxville command center conducted frequent calls with its physician leaders at facilities across Florida before, during, and after the storm to troubleshoot challenges and ensure adequate physician coverage.

In preparation for Harvey and Irma, the command centers established dedicated phone lines and email boxes where clinicians could report and request any storm-related assistance. The command centers also worked to ensure that clinicians’ families and pets were out of harm’s way so the clinicians could focus on patient care.

“For TeamHealth, the majority of our focus was on families. Getting families to a safe place and getting pets to a safe place. If the clinicians felt like their families and pets were safe and well cared for, they were very selfless in making sure they could provide care for those who needed it.”

– Matt Stapleton, Chief Operating Officer and Executive Vice President for Anesthesia; member of the Hurricane Irma Incident Command Team

During the preparatory phase and as the storms unfolded, TeamHealth facility medical directors at affected hospitals relayed content from hospital command center meetings to ensure appropriate coordination and complementary efforts. Those reports included updates on facility infrastructure, status of blood, medication, supplies, and other information needed to ensure coordination and uninterrupted operation.

RELYING ON TRAINING

In situations where there is little or no warning that a disaster is headed your way, it’s critical that your clinical outsourcing partner is trained in a variety of disaster response scenarios, so they can rely on that training to manage chaotic and unpredictable situations.

TeamHealth’s emergency medicine team at Sunrise Hospital & Medical Center in Las Vegas experienced a sudden disaster with the mass shooting that happened on the nearby Las Vegas strip. Hospital leaders jumped into action calling all available clinicians to the hospital and preparing triage and treatment areas that had to be expanded multiple times throughout the night. Although their training had never encompassed an influx of more than 200 patients in a matter of hours, clinicians used the framework of their mass casualty training to adjust to the extraordinary demands of the incident and to absorb the patient volume.ⁱⁱⁱ

When unforeseen challenges arose, clinicians quickly

devised solutions. A radiologist followed a portable X-Ray unit through the department to do spot-reads and write results on patients on the gurneys. When the electronic medication dispensing system couldn't keep pace with demand, a clinical pharmacist controlled medications. But perhaps most critical was the fact that more than 20 physicians and advanced practice clinicians rushed to the hospital and pitched in to save as many lives as possible—wherever they were needed with some participating in dozens of back-to-back surgeries.

“The saving grace was the response from TeamHealth clinicians and other doctors who showed up that night. We were able to staff the emergency room to four times our normal ER because we had such a great response from our doctors.”

– Scott Scherr, MD, Regional Medical Director, TeamHealth Emergency Medicine West Group; Chairman of Emergency Services, Sunrise Hospital & Medical Center.

NATIONAL RESOURCES FOR RELIEF

In Texas, hospital and TeamHealth command centers were preparing for Harvey, but no one expected the storm to stall over Houston for such an extended period of time. In some areas the storm dumped more than 40 inches of rain, causing catastrophic flooding that paralyzed transportation for days. TeamHealth brought in teams of clinicians to shelter-in-place at hospitals during the storm.

However, after days of living and working in their facilities and the realization that a wave of patients often arrive after a weather event has passed and roads have become navigable, those teams needed relief.

In the wake of Harvey, the State of Texas lifted the licensing requirements for clinicians, and TeamHealth put out a call to its more than 20,000 clinicians nationwide to volunteer to travel to Houston and relieve their fatigued colleagues. Its email “hotline” was overwhelmed by hundreds of volunteers. Ultimately, the incident command center airlifted 43 clinicians by private aircraft into the storm area, including physicians and advanced practice clinicians in emergency medicine, hospital medicine and obstetrics. The company's emergency aircraft were the first non-military aircraft to land in Houston following the storm, offering a welcome reprieve to teams on the ground.

“TeamHealth was able to reach all over the nation to bring in emergency room doctors and hospitalists, and we had volunteers who weren't from those large specialties – psychologists, doctors and nurse practitioners from skilled nursing facilities. We could have backed up staff in every venue that we have a specialist, we had so many volunteers.”

– Mary Haven Merkle, MD, TeamHealth Senior Vice President of Integrated Services



TeamHealth also drew on its executive leadership team's national connections with major dialysis providers, working with those organizations to bring strategic locations back online after Memorial Hermann's emergency departments saw an overwhelming number of dialysis patients who found their usual dialysis clinics closed and needed somewhere to go for this critical treatment, often converging upon already crowded emergency departments.

CARING FOR CAREGIVERS

Beyond the capacity to manage patient demand before, during, and after a disaster, an experienced clinical outsourcing partner will have processes in place to support clinicians and their families—making sure they are safe and have the resources they need to manage through the event.

For example, in addition to setting up a hotline for incoming calls from clinicians who may have needed assistance during a disaster, TeamHealth command center staff for Harvey and Irma made outbound calls to clinicians within affected areas, asking questions like: "How are you?" "How is your home?" "How is your family?" "Are they safe?" "Do you need anything?" "Do you need a hotel?" "Was your car lost in the flooding, and if so can we get you a rental car?"

The day after the shooting in Las Vegas, recognizing the magnitude of the mass shooting and its potential traumatic impact on those in the emergency department that night, TeamHealth brought in experts in post-traumatic stress and critical incident stress management to provide counseling. While some emergency department physicians may have a background in trauma or medical care in the military, others who were on duty that night—like medical scribes—do not. This important step helped individuals manage through their emotions and memories about what they saw and experienced.

"Scribes are generally pre-medical school, 20- to 22-year-olds just getting a taste of emergency medicine. They in no way, shape or form signed up for the number of deaths and trauma they experienced in the ER that night. By the next day we had experts on location splitting up our provider, advanced practice clinician and scribe populations so everyone felt empowered to participate and share their emotions."

– Steven Myles, Senior Vice President, TeamHealth West Group

BUILDING KNOWLEDGE

When a disaster has passed, a clinical outsourcing partner

with expertise in disaster management will leverage their experiences to better prepare for and respond to the next potential incident. Just like their hospital partners have disaster management plans, a savvy physician organization will have a structured approach to an anticipated disaster.

Before Harvey and Irma, TeamHealth had worked through previous hurricanes, and its leaders knew how to get incident command centers up and running quickly. After each disaster was appropriately managed, TeamHealth documented best practices and enhanced its formal checklist for managing through natural disasters.

The checklist is a living document that is regularly updated based on new experiences and lessons learned and covers nearly 100 pre-planning, active disaster and post-disaster tasks to ensure a robust response. Among the items on the checklist are:

- Pull clinician and staff lists to identify those who live and work in the potentially affected area, who is credentialed at the affected facilities and which other clinicians are licensed in the state
- Establish a command center and assign roles for tasks ranging from call facilitation and weather/traffic updates to communications and scheduling
- Determine a method for communicating personal safety
- Conduct twice-daily command center calls and the topics to be covered in those discussions
- Continually assess staffing, credentialing and communication needs
- Create "down-time" processes for key operations disrupted by the disaster
- Recognize key stakeholders after the event has concluded
- Update the checklist with new lessons learned

CONCLUSION

Almost every hospital will face some sort of natural or man-made disaster at some point. In addition to ensuring the hospital is prepared with a disaster plan and practice drills, it's also critical to understand the expertise and preparedness of your clinical outsourcing partners, such as the physician group providing emergency department

management. A clinical outsourcing partner with experience in managing disasters will have a structured approach to preparation and response, and they may be able to leverage national resources to support their hospital partners when disaster strikes.

LESSONS FROM THE FRONT LINES

Looking back on the events discussed in this document, and other disaster situations they have faced, TeamHealth clinicians have reiterated some of the key strategies for being prepared and having a robust response in a disaster situation. Among their top takeaways are:

- Plan for all types of events, not just the most likely event
- When there's warning—as in a weather event—begin preparation days in advance
- Bring in enough clinicians to shelter in place, then do what it takes to get them relief. Have “down-time” procedures for schedule and payroll when usual procedures are disrupted
- Have an organized checklist of supplies, including items for clinicians sheltering in place
- Have a process in place to track down every employee until 100 percent are accounted for
- Make sure team members have enough time off to attend to any damage or disruption at home and have a mental rest
- Being able to tell someone they can take their family, even their pet, to the hospital to ride out a storm will result in the best possible outcome for patients
- Use redundant communications, so if phone, video, text or email blast communication goes out, there are other options

- Be sure you can get in touch with FEMA, federal agencies, local government agencies and executive leadership within the organization at a moment's notice
- Test the capabilities of your electronic systems to see what workarounds or shortcuts might be available when your team needs to operate more quickly and efficiently
- Draw on any available national resources—from relief clinicians to relationships with other healthcare provider organizations—to solve problems and meet the needs of the hospital or community

If you would like more information, please contact our Business Development team today at **800.818.1498** or business_development@teamhealth.com for more information.

¹“The Price of Medical Emergencies: Study Examines out-of-Network Billing.” YaleNews, Yale University, 24 July 2017, news.yale.edu/2017/07/24/price-medical-emergencies-study-examines-out-network-billing.

²Dallas, Mary Elizabeth. “Most Hospitals Aren't Ready for Mass Tragedies, ER Docs Say.” Consumer HealthDay, 22 May 2018, consumer.healthday.com/general-health-information-16/emergencies-and-first-aid-news-227/most-hospitals-aren-t-ready-for-mass-tragedies-er-docs-say-734084.html.

³Woods, Alden. “‘Is This Real?’: Seven Hours of Chaos, Bravery at Las Vegas Hospital after Mass Shooting.” USA Today, Gannett Satellite Information Network, 30 Oct. 2017, www.usatoday.com/story/news/nation/2017/10/30/seven-hours-chaos-bravery-las-vegas-sunrise-hospital-after-mass-shooting/796410001/.

⁴Betbeze, Philip. “Physicians Rush To Houston In Harvey's Wake.” HealthLeaders Media, 30 Aug. 2017, www.healthleadersmedia.com/strategy/physicians-rush-houston-harveys-wake.



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