Into the Storm: Prepare for Severe Weather

Virtual hospital command center for emergency management

Only weeks after its LiveProcess implementation, Children's Medical Center put the emergency management platform to the test during two storms — Hurricane Gustav was followed within days by Hurricane Ike, one of the top 10 most destructive hurricanes to make landfall in the US.

Just before Gustav hit, Children's Medical Center decided to use LiveProcess for all of its hospital incident command communications. The hospital command center staff would use LiveProcess to communicate with each other in real-time, load documents and track the storm.

It was a leap of faith that paid off. When Ike hit and Dallas residents braced for the worst, Children's Medical Center's safety and emergency management personnel sprang into action while its medical transport teams coordinated with state emergency preparedness officials and neighboring hospitals.

Shuttered hospitals in Galveston and Houston forced a surge of patients. Over 16 hours, the Children’s Medical Center team transported 400 patients — including 50 newborns — out of harm’s way.

“This is where LiveProcess really sings — in a large-scale crisis and subsequent patient surge.”

Rachel Hedstrom
Communications Staffer
“We had people from large neonatal and pediatric institutions coming together in a time of crisis to help patients,” said Scotti Floyd-Edgar, RN, BSN, LP, clinical manager of Transport. “This speaks volumes about how large facilities in the state were able to drop their boundaries and work together for the good of a patient.”

Calm and orderly emergency management
Relative calm washed over the handful of personnel inside Children’s hospital command center (HCC), which coordinated supplies, patient transports and the expected surge into the hospital’s emergency room.

After Children’s started a LiveProcess event log, the hospital’s command center safety and liaison officers, working 24/7 in 12-hour shifts, would update the log from the HCC, so the rest of the command center staff could monitor the events remotely from the secure web-based application.

Regular meetings were held with all command center staff daily during the event, however, most of the command center staff only needed to report to the HCC after hours, and only if directed by the incident commander (IC).

The decision to use the LiveProcess emergency manager app only weeks after implementation may have left a few scratching their heads, but whatever concerns people had were quelled rather quickly. Staff learned how to use the system on the fly and found it quite easy and intuitive.

When Ike was bearing down, the team decided quickly to use LiveProcess again.

Rachel Hedstrom, a communications staffer and part of the hospital emergency management committee at the time, recalls how LiveProcess brought a sense of order to things: “With Hurricane Katrina, we were literally sitting in the command center until after midnight waiting for C130s to land with patients that may or may not ever come,” she said.

“We called a code yellow — external disaster — just before both Gustav and Ike hit, because it looked like we were going to get a significant number of patient transfers coming in. During a hurricane, there’s a lot of pre-planning involved, but hurricanes can change so quickly.”

The LiveProcess event log can be used by an individual hospital or multiple hospitals through a region or across the country to share and track messages, resource requests, and tasks as well as access documents, web links, photos, maps, and other materials.
An alternative to 24/7 incident command center staffing

“During the week leading up to Gustav and Ike, we were on calls several times a day with the state and various agencies. So it became crucial for all of us to get on board with LiveProcess as quickly as possible,” Hedstrom said.

“We were amazed how quickly things got rolling,” she added. “It’s hard to staff a command center 24/7 for a full week, but LiveProcess obviated that to a great extent. The platform allowed us to do most of the work remotely and actually more efficiently with the event log and its real-time communication tools.

“For example, if Dana Suell, Children’s Medical Center’s emergency management manager, learned something from the Dallas Medical Operations Center (DMOC), it could quickly and easily be posted on the event log. That way 10 people weren't calling the HCC or the DMOC for updates and everyone got the information they needed quickly and efficiently.

“Everyone was on the same page — literally — and the platform really enhanced the way we did incident command here at the hospital.”

Convenient collaboration across locations

In late 2008, Dana Suell assumed command of Children’s emergency management program. “Before I came to Children's, I was involved with industrial and community-type emergency responses, i.e., managing the scene of an overturned chlorine tanker or chemical explosion with the local authority having jurisdiction,” said Suell, who also is a certified healthcare emergency professional, Level 2 certified fire instructor and hazardous materials specialist. “What I'm doing now is very different, but I love it more than anything I've ever done before.”

An incident command system (ICS) and emergency response veteran, Suell came to Children’s three years earlier as a hospital safety specialist after working 13 years as an emergency response coordinator, a manager for health and safety, a safety and hazardous materials specialist, and a volunteer firefighter and EMT.

Suell sat alongside the team during Ike and Gustav, and like Hedstrom, vividly recalls the contrast with Katrina.

“Everyone was on the same page — literally — and the platform really enhanced the way we did incident command here at the hospital.”
“One of the nice aspects about LiveProcess, when Gustav and Ike came, our senior director for inpatient services, who also was part of our command center staff, was able to send me emails, monitor the weather, and submit questions on the event log from her home,” Suell said. “She didn't need to have someone stand in for her or be here 24/7 to see what was happening.

“When we started receiving hurricane patients, she was able to message the HCC through the event log and that was a big help for us because one of the things we want to do is manage the number of people in the command center.”

**Ready for National Disaster Medical Services flights**
For Suell, one of the biggest challenges during hurricanes is preparing for the potential patient surge from hard-hit areas.

“Hospitals often receive calls about incoming NDMS (National Disaster Medical Services) flights bringing patients to their area,” she said. “The plane may or may not arrive due to varying circumstances, so instead of having people up 24 hours straight waiting for patients, LiveProcess allowed us to communicate back and forth in real time, while keeping all of our team members constantly apprised of the situation.”

**Easy coordination with public agencies**
The incident command platform also allowed Suell to work closely with personnel staffing the Convention Center, which was used as the main shelter in Dallas for hurricane evacuees.

“We were able to work very efficiently with the DMOC, exchanging information, communicating supply needs and sharing documentation, as well as arranging for physicians and caregivers at the Convention Center and other shelters,” Suell said. “That was a huge help.”

**Tracking for Joint Commission compliance**
“The communication tools in the LiveProcess platform were very valuable for us during the hurricanes,” Suell added. “And now we have the Joint Commission documentation we need to show that we communicated and shared resources and assets with the local community and other hospitals.”

**Connectivity for a Level 1 trauma center**
Having a tool like LiveProcess Emergency Manager is consistent with Children's status as one of the most wired businesses in the country. In essence, it comes down to connectivity.

“LiveProcess allowed us to communicate back and forth in real time, while keeping all of our team members constantly apprised of the situation.”
“One of the reasons Children’s is a leader is its status as a Level 1 trauma pediatric facility,” Hedstrom said. “This means it can handle the worst of the worst. Because of this, Children’s Medical Center gets a lot of patients involved in big disasters and events like hurricanes.

“This is an area where LiveProcess gives the hospital the edge it needs to fulfill its mission to care for large numbers of patients at the drop of a hat. This is where LiveProcess really sings — in a large-scale crisis and subsequent patient surge.”

LiveProcess helps the hospital meet its overarching mission to keep patients safe from harm. “Mishandling patient surges poses a very real threat for medical error,” Hedstrom said. “So it’s no stretch to say the platform helps Children’s minimize those kinds of threats. I think any proven technological solution we attempt really enhances patient safety. When you’re looking at trying to manage a disaster, LiveProcess enhances your ability to organize things, and coordinate care.”

Ready for a pandemic: Influenza
Nowhere was that more evident than how the platform was used during the H1N1 (swine flu) crisis. Suell used LiveProcess to ready Children’s hospital command center in advance of the crisis.

The preparation paid off. Children’s handled a huge surge of pediatrics in its emergency room and alternate care site (ACS) during the event.

“I had members of our senior leadership team (SLT) sitting with me in the command center asking if we were going to set up LiveProcess for the event,” Suell said. “They had used or heard about the communication capabilities and felt they would assist us during the event.

“We input our emergency department totals and influenza-like illness (ILI) volumes on our LiveProcess H1N1 event log, among other informational pieces daily. This allowed ICS staff involved to login and review the numbers such as regional patient tracking data, case statistics, vital updates, as well as monitor the supply inventories. Being able to cut and paste vital information from such sites as the CDC (Center for Disease Control and Prevention) was also a benefit for our staff.”

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Efficient 24/7 emergency preparedness

Suell said she looks forward to tapping into the potential of the LiveProcess platform. “One of the most challenging aspects for us has been to bring a realistic approach to our disaster exercises in order to aid our personnel in their preparedness for actual events,” Suell said. “It is also critical that staff reach a comfort level with any technology we may use during these events.”

To that end, she looks forward to utilizing the drills and exercises component the LiveProcess emergency management platform offers. “The platform seems to streamline so many things, so I am anxious to work on that part of the program next.”

Suell also is working on setting up notification groups within the platform, including her medical decontamination team, the DMOC and Southwestern Medical District committee, which comprises three other hospitals, the University of Texas Southwestern Medical Center at Dallas, the City of Dallas Office of Emergency Management, and the Dallas County Office of Homeland Security & Emergency Management. She later plans to use the feature to organize a possible exercise on decontamination or mass casualty/fatality drill.

Like so many other managers at Children’s, Suell embraces any new technology that aids in doing her job as efficiently as possible.

“Emergency management professionals must be prepared 24/7,” Suell said. “Sometimes the job keeps me awake at night. But I come to work every day feeling grateful that I work at a place that puts such a premium on excellence.

“I truly feel lucky working here because our leadership team really takes a big interest in emergency management. It’s challenging. The boost of adrenaline I get is not unlike that of being a firefighter or EMT. But it’s not so much the need to control the situation as the need to help and strive for the best outcome for everyone involved.”
Born in the crisis-oriented world of emergency management, LiveProcess has more than a decade of success enabling large and complex networks to plan for and respond to critical, catastrophic and time-sensitive incidents. We now bring our proven logistics and coordination expertise across healthcare settings, within and beyond hospital walls. Our healthcare mobile apps enable personnel to take control of situations and collaborate to resolve operational disruptions, urgent health needs and routine transitions in patient care.

Headquartered in Chelmsford, MA, more than 600 healthcare organizations and public agencies rely on LiveProcess’ unmatched mobile, SaaS apps to effectively manage, analyze and respond to changing conditions.

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