Hospital Disaster Readiness Part 1: Planning & Preparing

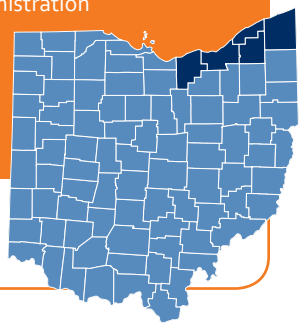
There have been a handful of events that draw a line through American history, demarcating a before and an after. Sept. 11, 2001, is one such date. It set in motion a series of activities, large and small, that shifted the United States to a new trajectory. While it was not the first time that a destructive event took place on American soil, the sheer magnitude of the Sept. 11 attacks was something not experienced in recent history. That day, of course, precipitated great change in the activities of this country on a global level. But it also sparked significant change at home. Ever since, people and organizations across the country have been working not only to make the U.S. safer, but to be better prepared for any kind of disaster, whether natural or manmade.

One initiative that grew out of the response to the 9/11 attacks and continues today is the Hospital Preparedness Program, a nationwide effort overseen by the U.S. Department of Health and Human Services, first through the Health Resources and Services Administration and later through the Office of the Assistant Secretary for Preparedness and Response (ASPR).

Under that program, since 2003, The Center for Health Affairs' emergency preparedness experts have served as the regional healthcare coordinators for 27 acute-care hospitals over the five-county region that encompasses Ashtabula, Cuyahoga, Geauga, Lake and Lorain counties. In this role, the team assists hospitals in strengthening their abilities to respond to disastrous events through:

- ☑ planning
- ☑ collaboration
- ☑ coordination
- ☑ grant administration

This piece highlights how they carry out that important role.



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Hospital Readiness

Under the Hospital Preparedness Program, federal funding is made available to states, which then disburse dollars to each region. These funds are used to support a wide variety of activities, including developing response plans, training staff, conducting drills, and purchasing equipment. In Northeast Ohio, this program has resulted in a substantial increase in the level of readiness of the region to effectively respond to a disaster.

Under this program, since 2003, hospitals in Northeast Ohio have been awarded annual grants that have ranged from a high of $2.7 million to a low of about $789,000. During the early years of the program, much of the funding went toward regional purchases of supplies and equipment made by The Center on behalf of area hospitals. Conducting these purchases at a regional level ensured that while hospitals would receive different amounts based on their size, they all were furnished with the same type of materials. This standardization supports collaboration and cooperation among hospitals, as they share staff and other resources during disaster response.

Hospital Match

Under the federal grant program, hospitals are required to provide a 10 percent match for each annual grant they receive. Typically, this is provided in-kind, primarily through the extensive time dedicated by hospital staff to participate in training and drills. The value of the total combined in-kind contributions of hospitals has ranged from $200,000 to this year's high of $420,000.

After the initial five years of the program, the funding shifted from regional purchases to supporting hospitals' individual needs. These are identified through the annual hazards and vulnerability assessments that hospitals conduct. Each year, they evaluate their readiness, identify gaps or needs, and focus their efforts on those areas. The Center then synthesizes these into a regional assessment, which is shared among the hospitals, allowing them to understand and make plans for addressing the region's vulnerabilities.

Drills & Exercises

One use of the regional assessment is in the planning of exercises. At least once each year, a large drill, or exercise, is conducted. These regional exercises involve not only hospitals, but all relevant entities in the community, including public health, police, fire, emergency medical services (EMS), emergency management agencies (EMA), the Red Cross, Federally Qualified Health Centers, and others. Together, these organizations test the plans and capabilities of the region to respond to a disaster.

One recent exercise, nicknamed Rat Pack, was designed to test response to a biological event. The scenario involved a freighter ship that spent a week at port in Cleveland, during which time large numbers of people began getting sick and arriving at hospitals. All five counties in the region participated in the drill. When, under the scenario, dead rats began appearing on the streets, the area health department sent them to the state lab for testing, where it was determined the rats had been carrying plague. The exercise allowed hospitals to test their abilities to care for an influx of patients while at the same time activating their Point of Dispensing (POD) plans, which are the basis for providing prophylaxis or medication to their staff.

The scenario also allowed for the testing of mass fatality plans, which involved the Medical Examiner's Office identifying resources, such as morgue trucks. Other entities were involved in the response in various capacities. For example, EMS transported patients, and their workers needed prophylaxis; public health was involved with requesting access to medications from the Strategic National Stockpile; and the Red Cross set up shelters to accommodate the surge of sick patients.

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These large annual exercises are elaborate and involve many entities. The planning of the scenarios, which typically requires nearly a full year, is done primarily through the Northeast Ohio Metropolitan Medical Response System (MMRS) Healthcare Coalition, of which The Center's emergency preparedness experts are participants.

In addition to these large annual exercises, smaller, more focused drills are conducted more frequently.

Equipment & Supplies

Preparedness means having enough of the right kind of supplies and equipment to respond to any one of a wide variety of events. A substantial share of grant funding over the years has been allocated toward developing caches of necessary supplies as well as purchasing specialized equipment that can be used in specific kinds of disasters. Examples of some of the larger equipment purchases include decontamination tents; oxygen concentrators; patient supplies; and secure, wireless radios for public safety and first responders.

Breadth of Events

One of the most significant achievements of these many years of preparedness work is the ability hospitals have today to respond to a wide variety of situations. They have plans and equipment that will allow them to respond in ways in which they were not previously prepared. Current hospital response plans encompass biological, chemical, radiological and explosive events.

Biological

Previously hospitals had primarily been prepared to manage naturally occurring events, such as a flu pandemic. With the advent of terrorism, hospitals have developed plans and procedures for responding to many other types of biological events.

Chemical

If hospitals should experience an influx of patients associated with any type of chemical spill or terrorist event, their trained emergency response teams are prepared to decontaminate patients quickly.

Radiological

Northeast Ohio is home to two large nuclear power plants. Hospitals within a 50-mile radius of either of those plants have developed plans for treating an influx of patients who may have radiological exposure.

Explosive

Explosive devices can create significant trauma, however hospitals and other entities in Northeast Ohio have the ability to care for more trauma patients faster than ever before. Hospitals have improved their ability to quickly triage those trauma patients, based on a triage system that has been developed and incorporated by all hospitals.

Joint Commission

The Joint Commission, which accredits hospitals and other healthcare organizations, incorporates emergency response into its accreditation process through the Emergency Management Standard. As a result, much of the work that is accomplished under the federal grants does double duty to ensure hospitals are meeting the requirements established by the Joint Commission. Under the Joint Commission standards, each hospital must have an emergency operations plan that includes six critical elements: communications, supplies, security, staff, utilities and clinical activity.[1] Typically, the large, annual regional exercise is planned with the Joint Commission in mind, ensuring hospitals are able to apply their activities under the scenario toward accreditation requirements.

Regional Coordination

Hospital care – particularly in the event of a wide-scale disaster – is not provided in a vacuum. One of the most valuable outcomes of this initiative has been the improved coordination among agencies in the community. This program sparked collaboration not only among hospitals, but also with the many other entities involved in disaster response. Prior to this effort, these organizations tended to work in silos. For the last 14 years, they have been coming together with the singular goal of determining how to best to provide for the care and safety of those who live in this region.

Today, as a result of their coordinated work and planning, they all understand how they are intertwined and how they can help each other during disaster response. Each organization has incorporated the others into their own emergency operations plans. They each understand their own role as well as how the others will participate. This coordination allows for a much stronger, better organized, and more effective response in an emergency situation.

Ongoing Work

As of today, hospitals in the region have nearly all of the equipment and supplies stocked and ready for disaster response. With respect to equipment, the ongoing work is primarily aimed at maintaining it, to ensure it remains in working order and to prevent it from becoming antiquated. A substantial focus of continued work relates to training. In addition to ensuring hospital staff are trained to implement emergency operations plans and utilize equipment, they also must maintain their knowledge of standards and regulations. In addition, specialized training is also regularly offered. Some examples include training for trauma nurses, emergency pediatric nurses, and advance burn life support.

The Center's emergency preparedness team, which comprises Beth Gatlin, RN, MA-HSM, ASPR project director, and Andrea Bishop, BSN, emergency preparedness project manager, continue to work with hospitals on an ongoing basis. Every 12 to 18 months, The Center's team meets individually with each hospital, to review their plans, discuss their needs, answer questions, and help develop solutions to any problems. Through this consulting work, The Center's staff also can connect hospitals with needed training opportunities as well as identify any additional purchases they may require.

The Future of HPP

The Hospital Preparedness Program is currently funded under a piece of legislation passed in 2013 called the Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA). This bill authorized the continuation of the program that had been underway for several years. As with previous versions of the legislation, however, PAHPRA is time limited and will need action by lawmakers to continue providing funding into the future. The next President and Congress will be charged with making that decision.

Hospital Disaster Readiness Part 2 Coming Soon…

In the next Policy Snapshot, a look behind the scenes will offer insight into how hospitals and other community entities have put all of this careful planning into action. Part 2 will explore the activities before and during the Republican National Convention, the Ebola outbreak, and other incidents that required activation of some or all of the components of area emergency operations plans.

Endnotes

[1] Response Systems. "JCAHO Compliance." Accessed August 4, 2016. http://www.disasterpreparation.net/resources.html