



## **FULL NARRATIVE – ATTACHMENT**

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**HEARING TITLE:** *"Is the Medical Community Ready if Disaster or Terrorism Strikes: Closing the Gap in Medical Surge Capacity"*

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### **General Comments**

The comments contained herein generally apply to pediatric hospitals and healthcare. However, the same issues, concepts and recommendations apply to adult healthcare.

Handling the human injury and illness results of disasters and terrorist strikes does not and will not fall equally to all hospitals. Key "**safety-net**" hospitals in each community will be called upon to meet the initial patient surge demands. These facilities must be built, prepared, equipped and staffed differently. These specialized services require specialized capabilities to be available twenty-four hours/day, every day of the year. This is an extremely costly proposition for those hospitals willing to make this part of their mission.

### **Facilities**

Most hospitals in the United States would not be able to accommodate the facilities/physical plant needs for surge patients resulting from a major disaster or terrorism strike. In fact, in the case of a known and impending potential disaster (hurricane for example) many facilities are looking to transfer critically ill and fragile patients to hospitals better able to withstand the potential insult.

The integrity of many facilities could be significantly compromised by storms or a tornado, let alone a terrorist strike. Because of the age of facilities, most hospitals are vulnerable. Just review the effects of one storm -- Hurricane Katrina.

A great lesson learned from Katrina was the fragility of public utilities and the devastating effects upon hospitals when utilities are disrupted. Most hospitals in the United States have only limited, emergency power for critical systems and equipment. They cannot produce potable water, move sewage, or maintain environmental control over temperature and humidity. During Katrina, many hospital structures remained well enough intact to provide care, but the building became unsafe and “sick” due to loss of environmental integrity.

Generally, most hospitals cannot accommodate patient transfer by helicopter. In the case of flooding or other surface disruption, helicopter transport may be the only way to deliver or move patients. Even in those hospitals where helicopter transport can be accommodated, helipads are often on the roof and cannot handle the weight or rotor span of large, multi-patient craft. This was a significant complicating factor during Katrina. Moving patients one at a time by helicopter is extremely inefficient, costly, and potentially dangerous.

Finally, very few hospitals maintain redundant equipment, supplies or materials on site for disaster use. Extra space to adequately accommodate patient influx is almost non-existent.

### **Clinical Considerations/Requirements**

The vast majority of hospitals in the United States simply cannot adequately react to disasters or terrorist strikes that result in large numbers of patients with significant injury, trauma or illness.

The “average” emergency room is not equipped to accommodate a significant surge. Generally, only certain hospitals (free-standing children’s, designated trauma centers, university/teaching) functioning as true **“safety-net” hospitals**, have the capacity or available clinical expertise to handle a surge of critically ill or injured patients.

In addition to building and systems issues previously discussed, the availability of medical and clinical personnel is also a significant issue. The “readiness cost” just to have certain clinical expertise on staff and available, before the first patient is ever seen, can easily cost a hospital millions of dollars per year. Trauma, general, orthopaedic, otolaryngologists, ophthalmologists, and anesthesiologists must all be immediately available as surgical specialties. Necessary medical specialists include internal medicine, infectious disease, radiology, laboratory, pediatricians, and emergency medicine.

Today, most all of the above specialists demand “call pay” to be available. Additionally, hospitals must also assure the availability of significant non-physician clinical (advanced nurse practitioners, nurses, techs, etc.) and support staff to provide adequate response and care. These readiness costs for a safety net hospital are staggering – multiple millions of dollars per year.

## The All Children's Hospital Story

We recently opened a new 259-bed state-of-the-art quaternary children's hospital and ambulatory building, supported by a complex central energy plant, in St. Petersburg, Florida. The cost to construct this facility was \$403 million. We estimate the **extra** cost to **upgrade** the facility to meet needed disaster preparedness and patient surge requirements was at least \$25 million. Documents showing improvements we made are attached to this report, but a short list is:

- Central Energy Plant and Fuel Tank Farm - 100% redundancy to maintain total environmental integrity and all utilities for at least two weeks
- Upgraded helipad to facilitate large patient transport craft
- Improved and storm-rated windows, protective walls and roofing
- Permanent decontamination stations
- Additional built-in medical gas and electric for surge capabilities
- Redundant emergency communications

Just to be a trauma center, our readiness (preparedness) costs exceed \$6 million per year. About one-half is paid as physician call pay, and the other half for required additional staff, supplies and equipment. Very little government financial support is received to offset these costs. Maintaining trauma readiness is a key benefit to accommodate patient surge due to a disaster or terrorist strike.

Specific surge capabilities, built into the new facilities to accommodate patients from disasters and strikes, include:

- Emergency Center equipped and sized to go from 27 to 54 patients
- Neonatal Intensive Care could be increased from 97 to 132 beds
- All other inpatient rooms could increase from 162 to 324 beds
- An entire 28-bed unit can be easily converted to negative pressure, allowing the quarantine and control of infectious patients
- Redundant warehouse storage to maintain and rotate supplies and stores for disaster requirements

These capabilities, as previously noted, were not inexpensive. But as the only free-standing, quaternary, regional pediatric center on the west coast of Florida, we felt these “upgrades” were necessary to maintain services to the population.

We cannot move our patients during a disaster or terrorist strike—no other facility can provide all the necessary clinical services. We usually receive a minimum of forty (40) patient transfers to All Children’s when a storm is approaching. These are sent by other facilities who fear they will not be able to provide the necessary care.

We are fortunate to have been able to build our new hospital to accommodate most surge capabilities. We are likely one of few hospitals in the United States that can adequately meet these demands. Paying for this “readiness capability” is expensive and an ongoing struggle.