

## PREPARING THE HEALTHCARE SYSTEM FOR CATASTROPHIC EMERGENCIES

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**H**OSPITALS ARE THE BACKBONE of the healthcare response to mass casualty events, and they will be critically important in the response to any catastrophic health event, such as an influenza pandemic, a bioterror or nuclear attack, a large-scale natural disaster, or other emergencies described in the National Planning Scenarios.

The HHS Hospital Preparedness Program (HPP) was established in 2002 to enhance the ability of local hospitals and healthcare systems to prepare for and respond to bioterror attacks and other public health emergencies. Sixty-two entities—including all states, the District of Columbia, and the nation's 3 largest cities—participate in the HPP and have received approximately \$3 billion in HPP funding since 2002.

While there is evidence that preparedness of individual hospitals has significantly improved since the program's implementation, the nation's healthcare system still remains largely underprepared to respond to large-scale catastrophic emergencies. The U.S. healthcare system is not now capable of responding effectively to a sudden influx of patients and the resulting demand for medical resources—staff, supplies, and space—that would occur during a catastrophic event. There are a number of developments, some of them already initiated, that would greatly improve the preparedness of the system for these large-scale events.

### *Recommendations*

► HHS and DHS should jointly develop a *national concept of operations plan for the healthcare response to truly catastrophic health events*.

In the early hours and days following the most serious and catastrophic health emergencies, such as a 10-kiloton nuclear detonation or a large-scale aerosolized anthrax attack in a major city, the response of our healthcare system will be critical to mitigating the resulting human suffering and death and overall public panic. Complex and coordinated healthcare and emergency response actions will need to be taken immediately by parties across multiple local, regional, and state jurisdictions to care for those made sick or injured by

the event, as well as the “worried well” and those who are not affected but who need care for routine and ongoing medical emergencies (eg, heart attacks, trauma, labor and delivery).

However, current public and healthcare sector emergency plans will not work during this scale of catastrophe, which would result in tens of thousands of individuals (or more) needing or seeking medical care for nonroutine illnesses (eg, acute radiation syndrome, anthrax) and potentially serious injuries.

Contributing to the complexities would be the need for an automatic response because effective incident command and control is likely to be in chaos in the first hours after such a disaster. In addition, we lack rapid diagnostics for screening victims. We have a fragmented, overwhelmed, and uncoordinated healthcare system that exists largely in the private sector. Multiple parties, including hospitals, public health departments, EMS, and emergency management agencies, are involved in healthcare response, but no one party would—or should—be in control. And critical infrastructure, such as roads and bridges, may be destroyed or blocked.

Therefore, in advance of catastrophic emergencies, a national concept of operations plan is needed that provides an overall strategy for the healthcare response and assigns clear roles and responsibilities to each participant—from the federal agencies down to local hospitals and clinics. This plan must be *national*, rather than federal, because health care is largely in the private sector. Minimally, this plan should address:

- Processes, criteria, and authorities for triggering the healthcare response to such emergencies before individual hospitals reach the point of capacity;
- Mechanisms for those in the healthcare system to achieve a level of situational awareness of the event (including the medical and public health responses) that enables them to effectively and appropriately respond in a coordinated way;
- Procedures for mass sorting, triaging, screening, and evacuating actual and potential victims;
- Systems for rapid and coordinated transportation and tracking of potentially tens of thousands (or more) of

patients to fixed or temporary facilities where health care or palliative care can be provided; and

- Means for coordinating patient care and treatment, including implementing disaster standards of care, providing palliative care, ensuring sufficient numbers of healthcare workers report to work, and coordinating volunteers.

Developing a national concept of operations for the healthcare response to a catastrophic health event will be complicated and will take a tremendous amount of political will. But until we do this, we cannot say that we have a national disaster health and medical system.

► **HHS should make healthcare coalitions the foundation of a robust national disaster health and medical system.**

One of the most significant outcomes of the Hospital Preparedness Program is the development of healthcare coalitions across the U.S. These local or regional networks of individual hospitals that collaborate on disaster preparedness and response and coordinate with public health, emergency management, and other response agencies have emerged as the foundation of a communitywide approach to health and medical disaster response. These coalitions already have proven valuable in dealing with more common medical disasters.

While these healthcare coalitions are functioning locally and regionally, they have not yet been integrated into a national network capable of coordinating health and medical response during large-scale disasters. HHS should strive to build and strengthen linkages among coalitions so that in times of national crises, coalitions can assist each other in managing the surge in demands for care, thus creating a system that is more agile and responsive. HHS is working to strengthen and link these coalitions together in important ways, and this is a critical development that should be supported and accelerated. These coalitions should play a fundamental role in our proposed national concept of operations for catastrophic health events.

► **HHS should continue to provide leadership on disaster standards of care.**

Some emergencies, such as a bioterror attack or a large natural epidemic, could overwhelm the medical capabilities of communities, regions, or even the entire country and would require drastic departures from customary healthcare practices. This shift from traditional, resource-intensive care that focuses on the individual to population-based disaster standards of care that focus on delivering the greatest good to the greatest number of patients requires the development of new clinical care standards and a process for their implementation.

Most hospitals and states have begun to address the issue

of disaster standards of care, but planning is in the early stages. While many of the issues associated with disaster standards must be addressed at the state or local level, and while some federal documents have been useful for planning, hospitals and healthcare coalitions throughout the U.S. continue to struggle with the complex issues that disaster standards raise.

HHS should continue to provide leadership to assist states in their efforts to address the many procedural, clinical, legal, regulatory, ethical, and reimbursement challenges associated with developing and implementing disaster standards of care for catastrophic emergencies. Clear national expectations and operational standards are also needed for so-called alternative care facilities (ACFs), which might be necessary in mass casualty events if hospitals are overwhelmed. HHS should take the lead for developing mechanisms to enable planners and experts across the country to share their planning approaches in support of national preparedness.

HHS will need to improve the practicality and flexibility of the process by which hospitals seek waivers or modifications of many federal requirements, such as the Emergency Medical Treatment and Labor Act (EMTALA), during public health emergencies to enable hospitals to focus their efforts on optimizing patient care. They should also recommend that legal experts develop model legislation for disaster standards of care, which states could adopt, to provide clear and comprehensive liability protections for healthcare providers who respond to catastrophic emergencies.

► **The Administration should seek to maintain or increase HPP funding for hospitals and healthcare coalitions.**

Most U.S. hospitals are private sector institutions, trying to survive financially in a highly competitive environment. Because of limited HPP funding, many hospitals contribute their own assets (eg, funding, staff time, training) to meet preparedness goals. In addition, participation in healthcare coalitions can result in additional costs. Without sustained federal funding, improvements in hospital preparedness associated with the \$3 billion investment of HPP funds are at risk, and the ability of the healthcare system to provide care to the victims of catastrophes will suffer.

The Administration should strive, at minimum, to maintain level funding for the Hospital Preparedness Program—approximately \$400 million per year—in order to maintain the current capacity for disaster medical response and to continue building local and regional coalitions. More funding will be needed to create the national disaster medical system the nation requires for biodefense and for ensuring an adequate medical response to catastrophic health events of all types.

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