

Roundtable on All Hazards Medical Preparedness and Response

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Congress of the United States, U.S. Senate Subcommittee on Bioterrorism and Public Health Preparedness, April 5, 2006.

I. Introduction

Ensuring the capacity to provide medical care to mass numbers of sick Americans in the aftermath of a major regional or national catastrophe should be a top national security priority. The Public Health Security and Bioterrorism Preparedness Response Act of 2002 helped the country take a number of important initial steps toward that goal. But planning for a medical response to mass casualties remains the most neglected component of public health preparedness and homeland security.

If an All-Hazards Medical response for hospitals is to be a major new initiative, there should be clearly articulated top hazards, and these must include pandemics and bioterrorist attacks. Of the kinds of catastrophes that could lead to mass numbers of ill persons, pandemic influenza and large-scale bioterrorist attacks would pose particularly severe problems given the prolonged duration of the crisis, the possibility for widespread geographic impact (even national impact in the event of pandemic), the fear of contagion to health care workers and their families, and the sudden demands on critical medical and material resources. Not all hazards should be of equal priority.

A sense of the impact of a catastrophe on the scale of a 1918-like pandemic on U.S. hospitals can be gained using CDC's FluSurge program. In a typical city in a pandemic of moderate duration, flu patients, at epidemic peak, would be predicted to require 191% of non-ICU beds, 461% of all of the available ICU beds, and 198% of all available ventilators. Hospitals are in no condition to deal with this level of catastrophe: 30% of U.S. hospitals are currently losing money; of those that are profitable, operating margins average 1.9%; 45 million Americans are uninsured, and hospitals provide \$25 billion per year in uncompensated care. There are shortages of healthcare workers of all kinds. The numbers of hospitals and EDs have all decreased in recent years despite nearly half of EDs being overcapacity.

The following comments address questions of the Committee regarding the federal government's efforts to ensure the country can provide medical care for mass casualties:

- How should the recruiting, credentialing, training of fed health providers be accomplished and organized?
- How should the federal government deploy health care providers in response to a national emergency?
- What is the most effective way to support a federal medical response and which agency should take the lead?
- What steps should be taken to foster a more coordinated response built on a strong public-private partnership?

II. Increasing the Healthcare Volunteer Workforce

Recommendations

1. Create an Office of Citizen Engagement within HHS, presumably within OPHEP. A clearly designated office should have responsibility for the training, credentialing, liability, funding efforts of the federal government intended to increase the health care workforce in crisis.
 - As top priority, office should focus on developing local/state based systems for recruiting, training, organizing volunteers to work in their own localities and states. Local volunteers would have pre-existing knowledge and commitment to their own communities, would not need to be transported to another region, would not need to be housed, etc.
 - The office should also be responsible for the systems that would allow more efficient sharing, credentialing, movement of volunteers from region to region, given that some kinds of catastrophes could not be handled without influx of volunteers from outside the region.
 - Will need plans to organize lay volunteers, not just health care professionals, to help hospitals provide mass medical care. Many of the things needed to run hospitals could be executed by lay professionals.
2. Increase funding and accelerate development of the state-based Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP); ESAR-VHP is intended to allow states to better utilize their own health care resources. The program should be expanded and accelerated. Clear public description and discussion of ESAR-VHP and other community volunteer programs (both health care worker and lay volunteer) should take place in advance of a crisis. Many healthcare workers do not yet see themselves as being crucial part of public health or community response, but would likely be willing to engage if the means of participation were clearer. Some health care professionals have wondered whether signing on to ESAR-VHP would mean they could be involuntarily drafted in a health emergency -- these kinds of misconceptions should be publicly addressed. One specific serious improvement would be for ESAR-VHP to induce states to use uniform credentialing guidelines across the country and to use databases that are compatible with each other to allow easier movement of volunteers across state lines should that be necessary.
3. Consolidate ESAR-VHP efforts and the Medical Reserve Corp (MRC) (whether or not this occurs in new office of Citizen Engagement); clarify role of MRC teams. Currently HRSA has responsibility for ESAR-VHP, while the Medical Reserve Corp program office in the Surgeon General's office has responsibility for the MRC but no budget to fund the MRC units and offers no provision of liability protection for volunteers. These efforts should be consolidated. If MRC teams are meant to provide local augmentation of the health care workforce, then they should be explicitly training with hospitals where they work. If MRC teams are meant to provide a source of health care volunteers to other regions of the country, the MRC program needs a concept of operations, credentialing and liability process, administrative systems, processes, etc. to organize such movement of volunteers, and it should be clarified how the MRC will relate to the NDMS (see below).
4. Make liability protection in emergencies clear and national in scope. If health care workers volunteer to work in a mass casualty catastrophe, they are potentially putting their own lives at some risk (and their families if the crisis involves a contagious disease). They should not also be exposed to the potential of being sued. The federal government should pass some form of Good Samaritan legislation that protects health care volunteers working with a state or federally sanctioned volunteer program -- with the exception being gross negligence. Absent this kind of liability protection, many potential volunteers will be dissuaded from participating.

III. Improving Organization of the Federal Medical Response

Recommendations

1. HHS should be the federal agency responsible for the Federal Medical Response to large-scale catastrophes. There is significant confusion in the hospital and medical communities around the country regarding which agencies and programs are responsible for hospital preparedness. In the 2002 bill, the ASHPEP was given responsibility for this work, but he has not had the human resources or budget to accomplish the wide range of work necessary to prepare hospitals for the range of terror attacks, pandemics and catastrophes the nation could face. Organizationally, matters were subsequently made worse when NDMS and the DMATS program were transferred to DHS. To fix this,
 - HHS should be given unequivocal responsibility and accountability for all federal medical response programs.
 - Within HHS, the hospital preparedness program should be elevated in importance, visibility and resources, and it should be made quite clear who is the lead federal official responsible for working with America's hospitals on hospital preparedness.
2. HHS hosp prep programs (and preparedness programs overall) would benefit from a stronger management structure and more senior managers. HHS should be given an Undersecretary for Preparedness that would be responsible for coordinating the large number of preparedness programs residing in HHS within OPHEP, HRSA, AHRQ, CDC, ONCHIT, NIH, FDA, et al. (It would be logical to include perhaps two or three other Undersecretaries responsible for the other HHS portfolios.)
 - An Undersecretary for Preparedness would raise profile, importance of all HHS public health preparedness programs -- including medical surge; should also improve coordination of these various public health preparedness programs -- most of which do not now report to the ASHPEP.
 - Creating the Undersecretary for Preparedness might be best accomplished by elevating the ASPHEP or by combining the Surgeon General's position with the new Undersecretary.
 - Whether or not an Undersecretary for Preparedness is created, HHS will need to substantially augment its senior management cadre with persons with extensive experience and contacts with the private health care system.
3. The National Disaster Medical Response System needs strategic re-consideration. NDMS is in the Emergency Preparedness Directorate in DHS. Its mission is to support federal agencies in coordination and management of the federal medical response, to train voluntary disaster medical assistance teams from various parts of the country to "provide care under any conditions at a disaster site" and transport victims into participating definitive care facilities. A report written by senior advisor to the Secretary of DHS said that as of Jan 2005, the staff had been reduced from 144 to 57; there were few qualified medical personnel to develop doctrine or policies, and the agency lacked defined, unified medical capabilities.

If NDMS is going to continue to exist, or if its work is consolidated or moved to another HHS program, then its mission, structure, and resources will need to be re-baselined:

- It needs to be in HHS and integrated with other HHS programs on hosp and public health preparedness.
- It should have as a top mission the support of hospital operations in communities in the midst of a crisis -- this is not currently the case. DMAT teams have utility in certain kinds of crises, but would do little or nothing in the face of large scale crisis when hospitals will have major roles to play. In setting whether there are major medical surge needs, doctors and nurses will be necessary but insufficient - patients will need variety of common medications, ventilators, oxygen, food, beds, IV fluids; doctors

and nurses may need personal protective equipment, security, etc. These cannot be provided by teams. The only realistic or sustainable way to deliver this complex set of needs is in hospitals.

- NDMS plans should be integrated with the HRSA program that now allocates hospital preparedness funds. They are now in 2 different agencies, entirely distinct efforts.
- NDMS should be coordinate with the ESAR-VHP and MRC programs -- which are all now completely distinct.

IV. Strengthening the Public-Private Partnership with Hospitals

Recommendations

1. Congressional and Administration leaders should call America's hospital leaders to action. Hospital leaders would be more convinced of the long-term commitment of the federal government to hospital preparedness and more clear on what was being asked of them if they were gathered directly by national leaders and asked to commit to a long-term partnership to prepare the country to deal with mass casualty attacks. Hospital leaders now see very little federal government engagement on this issue except for a grant program that grants money that is far too little to accomplish what is called for.
2. HHS needs to set more clear benchmarks for hospital preparedness and pandemic funding. The 2004-2005 guidance for hospital preparedness grant awardees is 49 pages long. HRSA is developing guidance for this fiscal year, and it will be important to simplify the guidance, eliminate some of the indicators, sets more clear priorities in this next round. But the guidance is in the right ballpark -- it's just that the funding that accompanies it would realistically pay for a tiny fraction of the work requested. The pandemic planning guidance recently issued by HHS for hospitals is reasonable, for the most part, but it needs more specificity, a clearer sense of top priorities, and a funding plan to meet the costs.
3. Increase funding for hospital preparedness.
 - The National Bioterrorism Hospital Preparedness Program (under HRSA) has provided funding to hospitals of approximately \$500 million per year nationally since 2002, and the FY07 request is \$487 million. This comes to about \$100,000 per year per hospital though in reality it is less because some of the money is used by local health depts. In December 2005, Congress appropriated \$350 million for state and local public health departments for pandemic preparedness; however, none of this appropriation is specifically identified for hospitals.
 - The Center for Biosecurity rough calculation of the minimum costs of realistic readiness for a severe (1918-like) pandemic indicates a need for at least \$1 million for the average size hospital (164 beds). The component costs to achieve minimal preparedness include:

Develop specific pandemic plan:	\$200,000
Staff education/training:	\$160,000
Stockpile minimal PPE:	\$400,000
Stockpile basic supplies:	\$240,000
Total:	\$1 million per hospital

- With approximately 5,000 general hospitals in the U.S., the national cost for initial pandemic preparedness would be \$5 billion. There would be recurring annual costs to maintain preparedness, estimated to be approximately \$200,000 per year per hospital. These figures exclude stockpiling anti-

rals, since there is a separate national plan to acquire these drugs. In addition, no monies are included for purchases of expensive equipment such as mechanical ventilators, since it is not clear that extra ventilators would be useful if there were no trained personnel to operate them. A rough estimate of the cost to double the number of ventilators in the country, using safe but inexpensive equipment, is \$1 billion.

4. Increase the priority of regional hospital coordination. Many key health care system preparedness and response actions will require regional coordination: regional resource allocation, patient redistribution, and use of alternative care sites all require collaboration among hospitals, and among hospitals and public health and emergency management agencies, both in planning and in response. PH Law of 2002 encouraged the development of regional coordination, but in 2006 there are only a few good examples of even nascent regional organizations. The U.S. has a highly fragmented, private, and competitive hospital sector with inherent disincentives for collaboration.

To qualify for hospital preparedness monies, hospitals should be required to participate in Regional Hospital Coordinating groups. The essential functions of such groups would include:

- Standardizing planning and preparedness among the participating hospitals;
 - Sharing of assets, staff, and patients among the hospitals during declared crises;
 - Sharing situational awareness in disasters to elected officials and health leaders;
 - Coordination of timing and means of surge processes (the expansion of patient capacity within individual hospitals while retaining near-normal practice standards) and supersurge processes (the further expansion of patient capacity involving use of alternative sites and/or significant alteration in practice standards);
 - Facilitation of a communitywide approach to ethical and political challenges (e.g., altered standards of care);
5. Modify the Stafford Act to allow for direct reimbursement of hospitals for uncompensated costs and extraordinary hospital care in the event of major catastrophes.
 - Hospitals' revenues will decrease dramatically during a pandemic or in other catastrophes, even though they will be experiencing record-high patient volumes. Hospitals will need to provide care to many patients who are uninsured and/or unable to pay; at the same time operating costs will be extraordinarily high. According to the AHA, the average hospital has only 41 days of cash on hand. Many hospitals would have insufficient cash reserves to survive a severe pandemic or other crisis that significantly interrupts operations for weeks.
 - Under current healthcare reimbursement schemes, hospitals lose money on nearly every illness-related hospital admission—especially those, like pneumonia, that are likely to result from flu. Normally, hospitals offset these losses with profitable elective procedures, but these elective cases will be among the first services to be cancelled or deferred in an attempt to respond to the demands of flu patient care during an epidemic.