

Roles of Hospitals During an Influenza Pandemic

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With most area hospitals operating at about 95% to over 100% capacity on any given day, it's evident that a flu pandemic will quickly overwhelm our ability to treat the thousands of patients who will surely stream toward the nearest emergency room.

Plans are being made now to cope with this potentially explosive threat. If worst-case projections were to materialize, Wake County could have as many as 225,000 residents in varying degrees of illness during a pandemic. In addition to readying our facilities and professional staff, the highest priorities are to prepare people to care for themselves and others at home, and to work with community partners to pool resources.

"We know that, logically, the first place people will turn to is their nearest hospital, but realistically, it will be impossible for any health care facility to expect to manage the huge influx of patients," says WakeMed Health & Hospitals CEO William K. Atkinson, PhD. "We see our leadership role as putting into place now a wide range of plans, including in-house preparation and training, and a vital network of community partnerships and public education. The absolute key to our success will be collaboration with other community partners."

Like most hospitals, WakeMed is approaching its organizational planning on five levels:

- **Individual and personal preparedness** – Informing the public that individuals will need to assume a great deal of responsibility for their own care or for that of their loved ones.
- **Employee preparedness** – Helping staff work through their own logistics to ensure they can be at work. This includes thinking through childcare options if daycares and schools are closed and taking other steps to put their personal lives in order.
- **Organizational preparedness** – Organizing the hospital system, at the executive level, to clearly understand necessary actions to be taken at both the community level (in coordination with other area hospitals) and within its own organization (eg, implementing the Hospital Incident Command System).

- **Departmental preparedness** – Educating each department within the hospital about how it specifically fits into the institution's bigger plan, such as considering every employee as essential and knowing that job duties may change rapidly as needed. For instance, we should expect that one person might take on tasks that are handled by many people on a normal day (eg, drawing blood, delivering food, emptying trash) in order to reduce the risk of exposure to affected patients.
- **Planning with key community partners** – Coordinating with other hospitals, home health agencies, the county's public health department, and emergency responders such as fire and police departments and emergency medical services. In addition to local partners, we need to understand what the state is doing and how the state fits into federal plans.

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Finally, the most difficult part of planning involves grappling with the inevitable ethical quagmires that await us in deciding who gets treated and how. How do we determine the sufficient level of care without lowering quality of care? Who will get respirators and limited medicine? Currently, many of society's health care efforts are directed at the elderly. This will, in all likelihood, not be the case when resources and treatment options are severely restricted.

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Special Challenges Faced by Hospitals

As Dr. Atkinson noted, people are likely to turn first to the nearest emergency room. Hospitals need to be prepared to deal with large numbers of people at once because many people will likely fall ill within a relatively short time span. Hospitals should also be prepared for the fact that ill people are likely to be in panic mode or close to it. This will require having traffic control and security measures in place to ensure safety of both personnel and patients.

Once patients are inside our doors, we need guidelines for triage decision making, with an emphasis on saving the most lives. Subsequent decisions will revolve around who gets treated, and then *how* they get treated. For those who are turned away, will we be prepared to arm them with information and possibly supplies that will help them cope?

When patients are admitted, another range of issues needs to be addressed, such as authority to use sufficient standards of care that may be different from the normal levels, maintaining a healthy, hygienic environment, and doing our best to minimize the risk of exposure to the caregivers. In addition to ensuring proper quarantine procedures and protective equipment for staff, we need to allow for staff rotation to prevent burnout, and provide stress management programs to help staff cope with the emotional aspects of such an overwhelming event.

Additionally, hospitals need to make sure other contingency plans are in place, including figuring out how to sustain core business activities over several weeks, mapping how financial issues related to reimbursement will be handled, and determining how to respond to interruptions in service, such as sanitation, water, or power. We must anticipate shortages, including in personnel (assuming various degrees of absenteeism) and supplies (because of the very real probability of disruption in deliveries due to suppliers' own absenteeism issues).

One of the most critical aspects of dealing with a pandemic—and one of the biggest challenges—will be both internal and external communications. From an internal standpoint, we need to anticipate employee fear and anxiety and be prepared to respond to rumors and misinformation quickly, calmly, and factually. WakeMed already has in place an “E-Notify System” for key response teams, allowing us to quickly alert needed personnel.

Externally, we will need to disseminate timely and accurate information to the community, including the status of our response and consistent messages about when and where to seek care. It will be critically important that all responding agencies coordinate their information efforts with community partners by using a Joint Information Center (JIC), with a single spokesperson for the JIC or from each agency. This will reduce confusion and present a more cohesive approach to the public.

Another challenge will be helping families, particularly those from out of town, obtain information about friends and family members they are unable to reach. As part of the planning process, decisions should be made about how to handle these calls and all communications, including designating a public spokesperson for the hospital who will represent us at a JIC if one is established.

Public Policy Options Needed

In the spirit of collaboration and preparedness, a flu pandemic drill was held in February 2006, bringing together 250 individuals from 36 agencies across the region. Wake County's hospitals participated (WakeMed Raleigh Campus, WakeMed Cary Hospital, Rex Healthcare, and Duke Health Raleigh Hospital), as did state health officials, Wake County Human Services, Wake County Emergency Medical Services, and a number of representatives from law enforcement, municipal governments, and nonprofit agencies.

Separately, the North Carolina Hospital Association created a Disaster Roundtable in response to the September 11th attacks that resulted in mutual aid agreements signed by all eligible North Carolina hospitals in 2004. These agreements address the sharing of resources, including staff, and provide a good foundation for any mass casualty disaster.

While these efforts are beginning to address the public policy issues raised by a flu pandemic, many remain. Wake County's Community Health Director Gibbie Harris sees the thorniest issues as the ethical dilemma of who gets treated, and how? “Everybody is really struggling to even have a conversation about this, because it's so difficult and it's so huge,” she said. “We know there will not be enough respirators, enough hospital beds, enough medicine. Whether we are going to be able to get to a place in this country where we make some public policy decisions on this remains to be seen. If we can't, then the decisions are left to organizations or, when you get right down to it, to individual doctors.”

Some decisions over who receives care will be performed initially by the 9-1-1 emergency response centers. In Wake County, callers are evaluated and placed in one of five categories. This same approach can be used in a pandemic to make preliminary decisions about who is even transported to a hospital or another care facility says Wake County Emergency Medical Services (EMS) Medical Director Brent Myers, MD, MPH.

Another public policy issue under consideration is the role of community health providers in a pandemic. For instance, public health departments could serve as a bridge for hospitals by establishing alternate care facilities that can serve those who are not the most critically ill but are unable to care for themselves at home. Harris believes all communities should explore possible alternative care venues as part of the planning process and then work out agreements that establish roles and sharing of supplies and other resources. “The key is to look in your county or your region, and collaborate and consolidate resources as part of your planning process, knowing that you will need more capacity than hospitals can provide and knowing there will be people who need different levels of care,” she said.

An innovative example of planning ahead and using resources wisely is the approach taken by Wake County EMS. Currently, all EMS personnel are trained to give shots. Even though a specific vaccine would likely not be available, having this skill available adds value to the health care sector. “We know we need to protect our workforce and keep them well enough to come to work,” says Dr. Myers. “So today, we are all

able to administer vaccinations, and we practice annually with flu shots. If a vaccine is available before or during a pandemic, we will be able to step up and help.”

Dr. Myers says his agency learned lessons shared by the Toronto EMS during the February 2003 SARS outbreak, and recommended that others use those lessons as a basis for planning. “Putting certain protocols into place early, such as what type of protective gear should be worn, provides EMS personnel with the confidence that their own risk of exposure will be minimized,” he says. “Our own responders need to know that we will modify some procedures as needed or outline the steps they should take to reduce their own chance of infection, and that will increase our chances that they will come to work when and where we need them.”

He echoes advice about forming partnerships now and modifying existing plans rather than starting from scratch. “The number one key is to make sure that you sit across the table and talked with your public health representatives,” he says. “Often, we operate in different spheres, but you have a lot of catching up to do if you are sitting down for the first time in a crisis situation.”

Conclusion

As is the case with any emergency planning, the key to preparing for a flu pandemic is to think through all of the “what

if” scenarios and get plans in place now for future use. The day the first wave of flu patients presents to your emergency room is *not* the day to begin planning how best to handle it. The large number of resources available through the federal and state governments are a good place to start. They provide guiding principles and checklists, such as a United States Health and Human Services’ booklet on bioterrorism and other public health emergencies, called *Altered Standards of Care in Mass Casualty Events*.¹

In addition, exploring potential collaborations with partners takes time, so reaching out to other area hospitals, public health departments, and nonprofits is a good way to form working partnerships. Deciding which resources can be pooled, including personnel, and drawing up legal or other formal agreements ahead of time can make for much more efficient operations later.

Also, it’s important to draft a plan in advance that can be shared with your organization and the general public, so that everyone has a clear understanding of what to expect, where to go, and who to call for information. If you do not have plans in draft stages, please make this a priority for your organization. If you have plans well underway or in place, congratulations! Let’s hope that you will never need to use them. **NCMJ**

Contributions from Kim Gazella.

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- 1 Altered Standards of Care in Mass Casualty Events: Bioterrorism and Other Public Health Emergencies. AHRQ Publication No. 05-0043, April 2005. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/research/altstand/>. Accessed February 1, 2007.



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