

*Mandatory emergency response training for clinicians
in New York State: Can a policy case be made?*

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ABSTRACT

There is no mandatory training for individual physicians with respect to overall emergency preparedness in New York State. This paper explores the policy implications of linking licensure and registration to mandatory competency-based educational programs on emergency preparedness response structure and high-risk biological agents. In this article, we explore the implications of mandatory registration and training with a single emergency response facility or agency, and we propose creative solutions that may make such a policy palatable to all stakeholders.

INTRODUCTION

The threat of a catastrophic emergency can not be taken lightly. While the authors have written this article from the perspective of a seacoast city at the northern end of "Hurricane Alley" that is a major hub for international travel, the range of potential natural and human-caused disasters is huge, and no region is exempt.

Well-prepared human resources for emergency response are scarce. The medical response to an emergency anticipates full or part-time hospital staff, volunteers, and public health physicians. A large incident would overwhelm the current healthcare infrastructure's capacity to respond; although there are 72,000 physicians in New York State (NYS), the number of those qualified and trained for response would not meet the requirements needed to deal with a major event.¹ When physicians do report to a facility to volunteer their assistance, they are often not familiar with the logistics of the facility's response plan,

even when they are volunteering at their own institutions. These physicians, despite their best intentions, may actually be detrimental to the response, causing confusion and possibly increased casualties.²⁻⁴

There is no mandatory training for individual physicians with respect to overall emergency preparedness in NYS. The only current and possibly relevant requirement is the New York State Education Law, which requires physicians to complete a competency-based infection control course every four years. This paper explores the policy implications of linking licensure and registration to mandatory competency-based educational programs on emergency preparedness response structure (incident command) and on high-likelihood events, including those involving biological agents designated as high-risk by the Centers for Disease Control and Prevention (CDC). An additional policy proposal might include the requirement that every physician register a single hospital as his or her emergency response facility or register with another approved health-related agency, such as the Medical Reserve Corps (MRC), Metropolitan Medical Response Teams (MMRT), Disaster Medical Assistance Teams (DMAT), National Medical Response Teams (NMRT), or the National Guard. Under such a policy, physicians not based in or affiliated with a specific hospital would be required to register with one of these latter options. Registration would be tied to a requirement for participation in at least one emergency drill or activity each year. Appendix 1 summarizes the proposed policy recommendations for mandatory education and training of all physicians in NYS with the goal of preparing for a large-scale response to a major biologic incident.

Similar recommendations in other states would require adjustments to match existing physician and hospital licensing requirements.

RESPONDING TO BIOLOGICAL EMERGENCIES

Background

In 1970, the World Health Organization (WHO) sponsored an analysis of potential bioterrorism impacts, which suggested that in a city of 5 million people, an outbreak of anthrax would lead to 600,000 infections and 240,000 deaths. The WHO also reported that an outbreak of tularemia in the same setting would result in 600,000 cases and 40,000 deaths, and plague would cause 270,000 infections and 65,000 deaths.⁵ More recently, Kaplan et al.⁶ developed predictive models that give a worst-case scenario for a city of 10 million with 1,000 cases of smallpox at Day 0; in the end, the city will suffer 367,000 cases of infection and 110,000 deaths. The researchers also showed that there is potential for up to 123,000 deaths following an anthrax attack in a similar population.⁷ No matter which of these estimates is closest to the truth, the numbers illustrate the enormous impact of these agents and the tremendous amount of planning and personnel resources that would be needed to respond.

Sudden surges in a naturally occurring disease or emerging infection would also put tremendous stress on the healthcare infrastructure. There is substantial concern about the potential for major outbreaks of SARS, avian flu and other influenzas, bovine spongiform encephalopathy (mad cow disease), West Nile virus, monkeypox, and hantavirus, among other diseases.^{8,9} Recently, the SARS epidemic in Asia infected over 8,000 patients and caused 774 fatalities, a fatality rate of 9.6 percent.¹⁰ Fortunately, the epidemic of the highly contagious disease was limited by a very robust public health response.¹⁰⁻¹² More recently, WHO reported on 55 confirmed human cases of the avian influenza A (H5N1) virus, of which 42 resulted in death—a 76.4 percent fatality rate among identified cases.^{11,13}

The role of physicians

“The primary care physician is crucial to emergency response. Three years after the events of

October 2001, the importance of practicing physicians has still not been fully recognized, nor has their role in an effective public health response been defined. Community-based health-care providers are one of the most critical elements in responding to any public health crisis, especially bioterrorism.”¹⁴ A survey of emergency department directors in New York City, reported in June 2004, revealed that more than 70 percent felt that more education in CDC Category A agents was needed; more than 70 percent felt that there were significant training needs in mass care, surge capacity, and isolation and quarantine procedures; and more than 60 percent felt there were training needs for incident command structure (ICS).¹⁵

Volunteerism will not provide the number of physicians needed for a large incident. To date, approximately 1,000 physicians—a small fraction of the total available—have registered with the local MRC in the New York City area.¹⁶ In New York City, the role of MRC physician volunteers would most likely be to staff designated points of distribution for dispersal of prophylactic antibiotics or administration of mass vaccinations. Further, there is no requirement that clinicians inform their affiliated hospitals of their role as MRC volunteers. If they are not aware of the physicians’ plans or other commitments, hospitals might be counting on these physicians as part of their own response contingencies.

EMERGENCY PREPAREDNESS REGULATIONS

Standard EC.1.4 of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) states that hospitals shall have an “all-hazards” command structure. It further requires an orientation and education program for all personnel, including licensed independent practitioners, who participate in implementing the emergency management plan. The education must address specific roles and responsibilities during emergencies and instruction on how to recognize specific types of emergencies, such as an outline of symptoms caused by agents that may be used in bioterrorism attacks.¹⁷

In order to receive their portion of the federal Bioterrorism Preparedness Funding, administered

through the Health Resources and Services Administration (HRSA), state health departments must require hospitals to train all licensed professionals working in the facility in the current standards of practice for the care, diagnosis, and treatment of persons exposed to biologic, chemical, radiological, and nuclear events. The specific biological threats are those classified by the CDC as Category A and Category B agents. In addition, the Department of Health (DOH) mandates training of key hospital personnel in the implementation of a hospital incident command system and requires that all staff be trained in the hospital's all-hazards emergency response plans.^{18,19}

These educational mandates appear to require physician education by proxy, but the picture is incomplete. Hospitals are mandated to train their employed physicians and interested independent practitioners, but there are no requirements in place regarding the training of private-practice-based volunteer clinicians. JCAHO Standard EC.2.9.1 requires hospitals to conduct regular drills to test their emergency management contingencies twice a year, either in response to actual emergencies or in planned drills.¹⁷ While the hospital must be in compliance with the drill requirements, there is no mandate for individual physicians to participate. Hospitals generally require their hospital-based faculty to take part in these exercises, but only a small fraction of the total staff needs to participate in order for the hospital to satisfy the drill commitment. In addition, there is little, if any, consideration for incorporating the large group of voluntary, private-practice-based clinicians.

Hospitals must develop protocols for managing volunteers, unsolicited help, and undocumented clinicians who present to the facility in an emergency or disaster. The requirement does not include procuring a "bank" of preregistered physicians who are credentialed and/or competent to participate in the event at hand.

NYS educational laws and regulations

In NYS, the agency with statutory responsibility for the licensing and certification of individual physicians is the Office of the Professions, a branch

of the state education department. There is currently no general requirement for continuing medical education (CME) as a condition of relicensure. There are, however, specific training mandates for child abuse and infection control (both of which are required by most other states as well). The infection control mandate was originally enacted as a response to concerns about transmission of HIV and Hepatitis B.²⁰ It is a statutory requirement, not a board regulation, and is monitored by the state health department. A physician not compliant with the requirements may be found guilty of professional misconduct, which is punishable by a variety of sentences, including fine, censure, or suspension or revocation of the professional's license. Among the core elements of the course are modes and mechanisms of transmission of pathogenic organisms in the healthcare setting, strategies for prevention and control, and the use of engineering and work practice controls to reduce the opportunity for patient and healthcare worker contact with potentially infectious material. In today's context, this law could be interpreted as relating to the responsibility of a hospital to care for those infected by a biological agent while minimizing further transmission. This would have to include information on emergency response systems and management (incident command). The change is unlikely to happen without reinterpretation or broadening of the requirement by the legislature.

Medical societies across the nation have historically opposed mandatory physician CME requirements. However, the resistance seems to be dissolving among the leadership, and the tide seems to be changing. NYS is now one of only eight states that do not have CME requirements for licensure. If NYS is to be a leader in promoting physician education and the preeminent state for emergency preparedness, legislators and medical societies need to agree that there is a public need for additional training and organization.

Opposing opinions

Of course, there are opposing opinions. A survey of members the NYS DOH/MSSNY Bioterrorism

Speakers Bureau revealed that the majority are against mandatory education.²¹ One responder stated,

To compel physicians or any other private health practitioner into training for a potential bioterrorist response fails to recognize our basic freedoms as Americans and citizens of the State of New York. Those in military or civil service are certainly under a different mandate as they each have offered a pledge to protect and defend. One could say that physicians are under a moral code to offer assistance to those in need, but you would need the input of an ethicist to define whether that should extend to accepting real or even perceived threats to one's own health. Except under martial law, private citizens should not be compelled into a service which could be a threat to their personal health or to their personal responsibilities to their families.

This opinion is well illustrated in the very limited response of the physician community in participating in the voluntary smallpox vaccination program in most states.

Another responder stated,

While in an ideal world, all physicians should be "trained," mandating such a program will likely be met with resistance. Many physicians, while interested, should not be trained as they would not be much help in an emergency. Also in this age of hospitalists, most primary care physicians no longer go to the hospital and are strictly office based. Tying the program to license/registration will not fly. Having a voluntary program may attract those truly interested in more advanced training.

STAKEHOLDER'S PERSPECTIVES

Physicians

A number of surveys have evaluated physicians'

thoughts about responding to a major bioterrorism event.^{22,23} In a recent national survey, few physicians reported that they or their practice were "well prepared" for bioterrorism. Still, most respondents reported that they would continue to care for patients in the event of an outbreak of "an unknown but potentially deadly illness," although only a narrow majority reported believing in a professional duty to treat patients in epidemics.²³ Mandatory training would not only prepare physicians for bioterrorism but could help develop preventive steps to minimize risk and reinforce professionals' ethical duty to treat.

Hospitals

Increasing regulatory requirements, cuts in reimbursements, insurance claim denials, the cost to install and maintain robust information systems, the cost of compliance with Medicare core measures, JCAHO standards, and various organizational mandates are constantly competing for the attention of hospital administrators. Attention to emergency preparedness has taken a back seat to day-to-day regulatory and fiscal concerns.

Hospitals are acutely aware that large numbers of untrained or undertrained physicians suddenly appearing during an emergency event would add confusion to an already difficult situation and could potentially increase the number of those requiring treatment. A requirement that increased the preparedness of physicians and forced them to clarify their anticipated response site(s) during emergencies would make it much easier for any hospital to plan for emergencies and to include appropriate physicians in training or drills. On the other hand, the HRSA grant monies allocated to individual hospitals barely cover the cost of deliverables, and in some cases they fail to cover these costs. Although the current hospital requirements mandate two drills per year, they do not mandate that all physicians participate. In order for hospitals to accommodate physicians' need to meet the proposed educational requirements and the requirement to participate in yearly drills at their designated institutions, multiple training sessions, drills, and exercises would have to be arranged. This

would put extra logistical, administrative, and financial burdens on the hospitals. If this service is not offered, though, the hospital may be seen as putting the physicians' licenses and registrations at risk.

DISCUSSION

A March 2003 statement from JCAHO described national bioterrorism preparedness as "a brewing cataclysm of underfunding, inexperience and under-preparedness of emergency response capabilities across America's communities."²⁴ Despite incremental progress over the last several years, Americans are still at risk.²⁵ As Lowell Weicker,²⁶ president of the Board of Directors of Trust for America's Health, three-term US senator, and former governor of Connecticut, stated, "We've only made baby steps toward better bioterrorism preparedness, rather than the giant leaps required to adequately protect the American people." In his testimony to the Labor, Health and Human Services Appropriations Subcommittee, Weicker asked, "What will it take to make bioterrorism and public health preparedness a real national priority?"²⁶ In more ways than one, we are not prepared for the answer.

Meeting the conditions necessary to link mandatory bioterrorism education, registration, and exercises to physicians' licensure and registration is a challenge. The education component would require either new legislation or revision of the current infection control education law. The scope of the training would require expansion to include bioterrorism agents and incident command. In addition, the frequency of training may need to be increased from every four years to annually. The emergency organization registration and exercise requirements would either need to be included in the legislation or be mandated through regulation by the health department. Although this might not be directly tied to licensure, as it is with the infection control mandate, provisions could be made to allow noncompliance to be considered professional misconduct.

Physician emergency preparedness education should not be linked to physicians' specialties. The key is that physicians maintain a working knowledge of their responding organizations' command

structures. Within each individual hospital's command structure, there is a mechanism for deploying the most capable people to the task at hand. However, if an incident were so large that it overwhelmed the system, physicians would be asked to perform functions that might be out of the areas of their expertise. This is why the linkage of an individual physician to an institution's incident command structure and its logistical contingencies are of utmost importance.

Physicians recognize the need for emergency preparedness, and many are willing to participate. However, a large percentage feel that they are not prepared.¹⁵ Providers also may be reluctant to have another nonfunded mandate forced upon them, even if it is in the public's interest, and especially if the probability that they will be called upon is not great. Hospitals, although they may agree in principle, may be resistant because such requirements would put an extra burden on them in terms of costs and personnel time. Large-scale drills interrupt the daily operations of hospitals, as well as the day-to-day functioning of physician practices. While hospitals are currently required to perform two drills annually, this is not enough for them to accommodate the number of physicians that would need to participate. This could put the hospitals and the physicians at odds.

In order to successfully execute this proposed policy, innovative solutions must be devised to make the mandates more palatable to the stakeholders. Since many hospitals already provide infection control training for their physicians and are required to teach bioterrorism and incident command protocols, these courses could be combined. These programs might be presented as part of departmental or divisional grand rounds or at a medical staff conference. They could be videotaped and given to physicians or linked to a hospital's Web site, so that physicians could review them and complete the competency tests at their convenience. CME credits could be provided upon successful completion of a statewide standardized competency-based test.

Federal grants have been awarded for emergency preparedness educational training programs. As stated, MSSNY has procured Office of Domestic

Preparedness (ODP) funding to provide conferences and Web-based training. Dinner programs or Web-based training for CME credits may be more palatable to the physicians.

The requirement that every physician participate in an exercise annually is the biggest issue, as some large hospitals have thousands of physicians on staff. One logical potential solution is a tabletop drill, which lends itself to a very large number of participants and could be performed in a large conference room, auditorium, or cafeteria. Not all participants would need to be directly "in play" during the exercise. Many could be observers, although careful attention would have to be paid to observer instructions and expectations in order to make the experience meaningful. The ultimate goal is to familiarize the physicians with the hospital's capacities, expectations, and limitations during a major incident. In addition, once a tabletop drill is organized with an initial scenario and actionable inserts across a timeline, it is very easily replicated. This way, such drills could be scheduled periodically at the provider's convenience, with little disruption to hospital and provider operations. Once again, this could be videotaped, and the physicians could participate as observers with guidance on expectations and then pass the subsequent competency test at their convenience for CME credit.

Enforcement of the policy, if passed, would depend on the vehicle of implementation. If it is linked to the infection control course, it would be under the auspices of the NYS DOH. The current method of enforcement is random audit, with noncompliers subject to charges of professional misconduct. If it were similar to the child abuse course, which is under the direction of the state education department, proof of compliance would have to be produced when applying for license or registration. Measures would have to be formulated for instances where compliance could not be proven (perhaps a fine or temporary license suspension until the requirements were met).

CONCLUSION

Our healthcare system's ability to respond to a catastrophic emergency event is still not adequate.

Perhaps this is because of the incomprehensible magnitude of such an event, or perhaps the system in place is considered adequate by those in a position to volunteer. But as the widespread deaths caused by naturally occurring diseases, such as plague and SARS, have taught us, we need to be certain that the medical community is in a position to meet the tremendous requirements of such events. If all licensed physicians were trained in the appropriate response to a large-scale biologic event, potential disaster might be avoided. Even if only a moderate proportion of those trained respond to a specific event, the response should be sufficient. The creative solutions discussed in the previous sections should make mandatory training and education palatable to stakeholders.

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APPENDIX 1. SUMMARY OF PROPOSED POLICY RECOMMENDATIONS

1. *Mandatory bioterrorism training*

Licensure and registration requirements for physicians in New York State should include mandatory annual competency-based educational programs on overall emergency preparedness response structures (incident command) and on the high-likelihood, high-risk biological agents.

2. *Designation of response organization*

a. All physicians with hospital staff privileges must identify one hospital at which they are on staff as their designated response hospital and inform any other hospitals at which they are on staff that they are not to be a part of their response plans.

b. As an alternative, a physician may register with a local or regional Medical Reserve Corps (MRC), Metropolitan Medical Response Team (MMRT), National Medical Response Team (NMRT), Disaster Medical Assistance Team (DMAT), or the National Guard as his or her designated response organization.

c. Physicians who do not have a hospital affiliation must register with a local or regional MRC, MMRT, NMRT, DMAT, or the National Guard as their designated response organization.

3. *Mandatory bioterrorism drill participation*

All physicians must participate in at least one annual emergency drill/exercise with their designated facility or organization.