EDITORIAL

Evolution of the Veterans Health Administration's Role in Emergency Management Since September 11, 2001

Aram Dobalian, PhD, MPH, JD; Richard Callis, MSE; Victoria J. Davey, PhD, MPH, RN

The attacks on the World Trade Center in New York City and at the Pentagon on September 11, 2001 (9/11), and subsequent disasters including Hurricane Katrina in 2005, the H1N1 pandemic of 2009, and the Deepwater Horizon oil spill in 2010, have highlighted the critical need for federal agencies to prepare to execute their responsibilities during emergencies. As described here, these events have led the Veterans Health Administration (VHA) of the Department of Veterans Affairs (VA) to make significant strides to improve its own and the nation's preparedness for disasters and emergencies in the decade since 9/11 (Table). This editorial summarizes the little-known role of VHA in emergency management, describes the growth of this role since 9/11, discusses the challenges that VHA confronted during this period, and summarizes ongoing challenges the agency is attempting to address. It is our contention that examining VHA's evolving role since 9/11 will provide useful lessons for other health care organizations' emergency preparedness planning.

VHA is a critical but often overlooked aspect of our nation's emergency preparedness, despite its extensive role in both national and community emergency preparedness.[1] By law, VHA provides health care to enrolled veterans first, but it can provide support to communities when local emergency needs arise or the federal government declares a disaster. In this capacity, the extensive resources of VA as a nationwide, integrated delivery system may be used to support other federal and state agencies and local communities by providing public health and medical services after emergencies and disasters.

Interest in and support for the emergency preparedness role of VHA increased greatly after the 9/11 attacks. From 2001 to 2011, the budget for this mission grew from $7.9 million to $156 million[2] in recognition of the fact that the broad geographic reach of VHA's 152 medical centers and hundreds of clinics could be used to provide emergency medical care to veterans and local communities after a disaster or public health emergency. During 2010, VHA had a daily average of 5000 available hospital beds that could have been used during an emergency.[3] The emergency management role VHA plays includes providing personnel, pharmaceuticals, supplies, and other support to the National Disaster Medical System. In particular, VHA manages 56 of the 71 federal coordinating centers, which assist with patient movement and provide health care during emergencies.[4,5]

As summarized by Kizer and Dudley, the extensive reengineering of VHA between 1995 and 1999 that transformed the agency from a system that was widely criticized for providing poor access and quality of care into an organization that is recognized as a model for health reform is well documented.[6] In particular, one of the key factors underlying this transformation was increased management accountability. This accountability is predicated on regular, ongoing evaluation, and extends to the emergency preparedness and response efforts of VHA. For example, a 2006 report by the VA Office of the Inspector General reported that additional work was necessary on training, community participation, and decontamination activities.[7] In particular, the report noted that although VHA had developed initiatives to address these concerns at the national level, medical center and clinic employees did not consistently receive training and emergency plans did not always include some required critical training elements. Large organizations such as VHA often struggle to ensure that leadership at all of the facilities and staff at all levels understand and appreciate the importance of emergency management.

Hurricane Katrina was a significant event in the preparedness capabilities of VHA. Although VHA did not experience any loss of life from the hurricane,[8] hundreds of patients, staff, and family members were evacuated from the affected VHA facilities. Following Katrina, VA deployed more than 1300 personnel and 12 mobile clinics to Louisiana and Mississippi. The clinics provided pharmaceuticals and other interventions to approximately 15 000 patients, including 11 000 who were not veterans. The disaster led to the identification of areas for improvement related to challenges that occurred such as breakdowns in communication.[9] VHA has sought to address some of these concerns regarding communication through the purchase of satellite telephones.

Moreover, VA hospitals in Gulfport and New Orleans were closed as a result of the hurricane. The loss of these facilities and the fact that breaking ground for a new hospital in New Orleans did not begin until 2010 have doubtless decreased the ability of VHA to provide care to veterans who remained in those communities. The extent of this impact is unmeasured at this time.

After the problems that surfaced in the response to Hurricane Katrina, VHA began a 3-year assessment of the readiness of all of its hospitals.[10] From 2007 to 2010, VHA conducted, through an independent third-party contractor, a study of its emergency management programs at each facility. VHA initiated this assessment to answer the straightforward question, "are we ready?"

https://doi.org/10.1001/dmp.2011.61 Published online by Cambridge University Press

More specifically, this assessment was designed to gather data to document the baseline strengths of and areas for improvement for VHA. Postassessment, the independent contractor recommended that VHA hospitals that serve the most complex patients have a full-time emergency program coordinator, and stressed a need for more fully developed exercises and testing at some facilities. VHA is considering the implementation of these recommendations. VHA continues its efforts to improve its emergency management functions and accordingly began a new 3-year follow-up assessment. In addition, this interest in ongoing evaluation led the VHA Office of Public Health to establish the VHA Emergency Management Evaluation Center (VEMEC) in 2010. VEMEC's mission is to develop an evidence base that strengthens the emergency management activities of VHA. As VEMEC and other VA researchers expand efforts to systematically assess these activities, it is hoped that the extensive data that VA collects on its patients and systems will be used to make significant contributions to move beyond the "few evidence-based performance measures and standards [that] exist to gauge the effectiveness of national health security efforts."[11] In addition, the research efforts of VA outside of preparedness may have applicability to disaster medicine and public health preparedness. For example, substantial efforts are under way within the VA research community to advance treatment and rehabilitation after multiple-trauma and traumatic brain injuries and to improve care for post-traumatic stress disorder, each of which is an area of significant concern in disaster medicine and public health preparedness.

In emergency management, VHA has sought to build closer ties with other federal agencies and with state and local organizations. At the national level, VA maintains close ties with other federal agencies. In contrast, VHA's involvement at the local level varies significantly across the nation. VHA has sought to address this acknowledged gap through various efforts aimed at requiring its emergency managers to work locally. These efforts have met with mixed success, which reflects the challenges involved in establishing partnerships. As a consequence, VHA medical facilities vary from highly involved to relatively uninvolved in their local communities' preparedness activities. Further work by VA is necessary to strengthen these ties with local communities, with the hope that such efforts will strengthen community resilience. These efforts would benefit from more research on how to better develop and sustain interorganizational partnerships.

As noted, efforts to strengthen the preparedness and response of VA are ongoing. For example, VHA is considering a requirement that all of its facilities be able to sustain the operation of mission-critical systems without help from within or outside VA for at least 48 hours after an event. The Joint Commission standard requires a plan for 96 hours, but it does not require that a facility maintain its operations during that period. VHA is considering this requirement as part of its focus on mitigation, specifically how to improve the resiliency of VA medical centers after disasters of any type.

TABLE

Example VA Emergency Management Activities Since the September 11, 2001, Terrorist Attacks on the World Trade Center and the Pentagon

Selected Response Activities
Operated 17 of the 18 FCCs after Hurricane Katrina in 2006
Operated 3 FCCs after Hurricanes Gustav and Ike during the 2008 hurricane season
Coordinated evacuation of patients to Tampa and Atlanta after the 2010 Haitian earthquake (VA provided assistance to >100 patients from Haiti, and deployed 5 medical personnel to the island)
Selected programmatic and operational changes
Established internal pharmacy caches
Developed medical center decontamination programs
Developed a comprehensive pandemic influenza plan
Created a personal protective equipment supply calculator
Developed specifications for a better-fitting N95-level respiratory protection mask
Increased security at facilities
Developed a continuity of operations plan
Developed training materials that address the role of clinical leadership and various threats (chemical, biological, and radiological warfare agents; blast and explosive weapons; and potential effects of weapons of mass destruction on mental health)
Expanded VHA's DEMPS, the main program for clinical and nonclinical staff to be deployed to an area struck by an emergency or disaster. DEMPS includes >8000 VA employees
Rollout of 12 "leading indicators" of preparedness to assess facility preparedness beginning in 2011 and conducted annually thereafter

DEMPS = Disaster Emergency Medical Personnel System; FCC = federal coordinating center; VA = Department of Veterans Affairs; VHA = Veterans Health Administration.

The article by Schult et al describes some of VHA's efforts to improve its preparedness and response capabilities during the past decade.[12] VHA has made marked improvements since 9/11, although much work remains. The evidence base that supports the value of these improvements is more anecdotal and less empirical than would be ideal, both in terms of the work that VHA has done and the work that the broader field of disaster medicine and public health preparedness has undertaken, but VHA has begun efforts to address this limitation. The studies on veterans and VHA in this special issue reflect this nascent but growing evidence base.

Other organizations can learn from the efforts of VHA to improve its preparedness. In particular, the need for critical self-examination and measurement of an organization's broad emergency management capabilities are important starting points for other organizations. Improvement is not possible without first assessing baseline preparedness. Moreover, the work done by VHA in this past decade underscores the importance of ongoing efforts to train and exercise existing and new personnel on a continuing basis. Such efforts require dedicated professionals who are able to devote significant portions of their time to ensure adequate and ongoing preparation for disasters. Significant areas for improvement remain, but we contend that the investments that VHA has made in preparedness have resulted in a more experienced and better prepared federal agency in the

https://doi.org/10.1001/dmp.2011.61 Published online by Cambridge University Press

decade since 9/11—a little-known but invaluable asset in the nation's armamentarium against local or widespread emergencies.

Author Affiliations: Dr Dobalian is director, VHA Emergency Management Evaluation Center, research health scientist, VA HSR&D Center of Excellence for the Study of Healthcare Provider Behavior, Department of Health Services, University of California, Los Angeles School of Public Health. Mr Callis is acting director, VHA Office of Emergency Management (Martinsburg, WV). Dr Davey is chief public health officer, VHA Office of Public Health.

Correspondence: Address correspondence and reprint requests to Dr Aram Dobalian, VHA Emergency Management Evaluation Center, 16111 Plummer St, MS-152, North Hills, CA 91343 (e-mail: aram.dobalian@va.gov).

Received for publication July 11, 2011; accepted July 22, 2011.

The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the US government.

Author Disclosures: The authors report no conflicts of interest.

REFERENCES

1. Veterans Administration and Department of Defense Health Resources Sharing and Emergency Operations Act, 96 Stat. 75(1982).
2. Bascetta CA. Homeland security: need to consider VA's role in strengthening federal preparedness. www.gao.gov/new.items/d02145t.pdf. Published October 15, 2001. Accessed July 29, 2011.
3. Emergency Preparedness. *Evaluating the US Department of Veterans Affairs' Fourth Mission. Subcommittee on Oversight and Investigations of the Committee on Veterans' Affairs. 111th Congress*. 2nd ed. Washington, DC: US Government Printing Office; 2010.
4. Kizer KW, Cushing TS, Nishimi RY. The Department of Veterans Affairs' role in federal emergency management. *Ann Emerg Med*. 2000; 36(3):255-261.
5. Koenig KL. Homeland security and public health: role of the Department of Veterans Affairs, the US Department of Homeland Security, and implications for the public health community. *Prehosp Disaster Med*. 2003; 18(4):327-333.
6. Kizer KW, Dudley RA. Extreme makeover: Transformation of the veterans health care system. *Annu Rev Public Health*. 2009;30:313-339.
7. Emergency Preparedness in Veterans Health Administration Facilities. *Publ no. 04-03266-51*. Washington, DC: VA Office of Inspector General; 2006.
8. Dobalian A, Claver M, Fickel JJ. Hurricanes Katrina and Rita and the Department of Veterans Affairs: a conceptual model for understanding the evacuation of nursing homes. *Gerontology*. 2010;56(6):581-588.
9. Audit of VA's Response to Hurricane Katrina. *Publ no. 06-02860-215*. Washington, DC: VA Office of Inspector General; 2007.
10. McCarthy ML, Brewster P, Hsu EB, Macintyre AG, Kelen GD. Consensus and tools needed to measure health care emergency management capabilities. *Disaster Med Public Health Prep*. 2009;3(2)(Suppl):S45-S51.
11. National Health Security Strategy of the United States of America. *US Department of Health and Human Services*. Washington, DC: Office of the Assistant Secretary for Preparedness and Response; 2009.
12. Schult TM, Awosika ER, Hodgson M, Martinello RA. 2009 influenza pandemic impact on sick leave use in the Veterans Health Administration: framework for a health care provider–based national syndromic surveillance system. *Disaster Med Public Health Prep*. 2011;5(Suppl 2):S235-S241.

https://doi.org/10.1001/dmp.2011.61 Published online by Cambridge University Press