

Ebola planning created need for unprecedented preparedness in hospitals

April 1 2015

Hospitals and health systems preparing for and treating patients with Ebola Virus Disease (EVD) in the fall of 2015 faced unexpected challenges for ensuring safety of staff, patients and the community. The experiences are detailed in two studies published online in *Infection Control & Hospital Epidemiology*, the journal of the Society for Healthcare Epidemiology of America (SHEA).

In a case study of the care of two [patients](#) with confirmed or suspected EVD at the National Institutes of Health (NIH) Clinical Center's Special Clinical Studies Unit, a multidisciplinary team detailed the challenges and surprises encountered in preparing and caring for patients with EVD. Although procedures for similar care had been long established, the reality of the patients' cases required flexibility and ability adjust procedures quickly.

"Years of planning and drills for care of a patient exposed or infected with Ebola could not anticipate the external scrutiny in which care was delivered," said Tara Palmore, MD, a lead author of the NIH case study and hospital epidemiologist in the NIH Clinical Center. "Many precautions were taken to prevent the spread of the virus, and some were taken to mitigate fear, even if science did not always support those fears. We were humbled by the commitment of healthcare providers and others to the mission of caring for these patients."

While the experiences of NIH [staff](#) illustrate the intensive and special efforts required for this care, a study detailing a survey of more than 250

SHEA members—including [hospital](#) epidemiologists and [infection](#) preventionists in 41 states and the District of Columbia, including all of the U.S. centers that have cared for EVD—demonstrates the extensive preparation underwent throughout the country. Survey respondents suggest that preparedness exercises, including institutional plan development, staff training in triage and personal protective equipment (PPE) use, and managing changing national and international guidelines, took up more than 80 percent of infection control staff time, leaving time for only 30 percent of routine infection prevention activities to be completed during this period.

Key themes include:

- **Interest from Media and General Public:** A surge in interest from both the media and general public made it more difficult to preserve patient confidentiality at NIH. Staff did not anticipate the high volume of calls to the unit from other medical centers and the public.
- **Attitudes toward Ebola:** NIH noted that the anxiety fueled by the admission of these patients was reminiscent of the AIDS epidemic in the 1980s.
- **Transparency and Patient Impact:** Transparency with the public and patients was crucial. Communication with staff and patients, both inpatient and outpatient, were distributed to reassure everyone of the detailed infection control precautions in place. Despite these efforts of reassurance, more than 40 patients canceled or rescheduled appointments. In the survey of SHEA members, while only two patients were diagnosed with unrecognized EVD, more than 140 were evaluated. This created trickledown problems including delays in patient care and patient anxiety.
- **Staffing:** The team at NIH was able to coordinate an all-volunteer frontline staff that included infectious disease specialists, nurses,

intensivists, lab and radiology technologists, and respiratory therapists. Trained observers were onsite around-the-clock to monitor each staff member through the process of putting on and removing PPE, helping guarantee staff [safety](#).

- **Training:** NIH conducted training with a large cadre of staff, prioritizing staff that would provide direct care or handle patient specimens. Training was time and labor intensive. Nationally, 64 percent of survey respondents noted that care teams would be selected primarily from volunteers. While 65 percent of respondents reported hosting drills or exercises to help staff prepare, only 30 percent of frontline providers has been trained in appropriate PPE use and less than half of hospitals could provide laboratory testing of patients with suspected EVD.
- **Waste Disposal:** NIH worked with trained contractors to undertake this endeavor. Working with state and local sanitation officials, clinical leadership developed a plan to adequately address concerns around waste disposal.

"Hospital Ebola preparations required extraordinary resources, which were diverted from routine infection prevention activities," said Daniel J. Morgan, MD, MS, an author of the SHEA survey and associate professor of epidemiology and public health at the University of Maryland School of Medicine. "Patients being evaluated for Ebola faced delays and potential limitations in the management of other diseases that are more common in travelers returning from West Africa."

More information: Tara Palmore, Kevin Barrett, Angela Michelin, Amanda Ramsburg, Laura Lee, Richard Davey, David Henderson. "Challenges in Managing Patients who have Suspected or Confirmed Ebola Virus at the National Institutes of Health." *Infection Control & Hospital Epidemiology*. Web. (April 1, 2015).

Daniel Morgan, Barbara Braun, Aaron Milstone, Deverick Anderson,

Ebbing Lautenbach, Nasia Safdar, Marci Drees, Jennifer Meddings, Darren Linkin, Lindsay Croft, Lisa Pineles, Daniel Diekema, Anthony Harris. "Lessons Learned From Hospital Ebola Preparation." *Infection Control & Hospital Epidemiology*. Web. (April 1, 2015).

Provided by Society for Healthcare Epidemiology of America

Citation: Ebola planning created need for unprecedented preparedness in hospitals (2015, April 1) retrieved 18 April 2024 from

<https://medicalxpress.com/news/2015-04-ebola-unprecedented-preparedness-hospitals.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.