Senate Committee on Appropriations

Full Committee Hearing

U.S. Government Response: Fighting Ebola and Protecting America

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Testimony for the Record

Submitted by:

The Roundtable on Critical Care Policy

President, Stephanie Silverman

Chairwoman Mikulski, Ranking Member Shelby and other Members of the Committee, we thank you for holding this important hearing and we appreciate the opportunity to submit testimony for the record. As the Committee contemplates funding measures to support a government response that will protect Americans from the threat of an Ebola outbreak and other future biologic threats on U.S. soil, the Roundtable on Critical Care Policy urges the Committee to prioritize funding that will enable our nation's intensive care units (ICUs) to be prepared with the workforce, research and federal program support necessary in the event of a widespread public health emergency, such as Ebola.

Critical care is primary care for the critically ill patient whose illnesses or injuries present a significant danger to life, limb, or organ function. Each year, over five million Americans are admitted into medical, surgical, pediatric, and neonatal ICUs, with the majority of these ICUs already operating at or near capacity every day.[i] In the event of a wide-spread emergency, our critical care system would be stretched beyond its limits. The care provided in the ICU is highly specialized and complex due to the extreme severity of illness of the patients, often involving multiple disease processes in different organ systems at the same time. Moreover, providers of critical care require specialized training because the care delivered in the ICU is technology-intensive and the outcomes have life or death consequences.

Yet, despite the significant role critical care plays in providing high quality health care for the critically ill and injured, critical care is rarely understood as distinct within the continuum of health care delivery, or for that matter, in the context of public health preparedness. This relative lack of focus on critical care in federal disaster policymaking is all the more alarming given that, when faced with a widespread health emergency, the critical care delivery system

will play an integral role in our nation's medical response—a fact that we've seen highlighted by Ebola patients who require teams in the ICU to provide intensive, multi-disciplinary, supportive care for their treatment. To that end, if we are to boost the overall preparedness of our nation to respond to a public health emergency such as an Ebola outbreak, it is paramount that a strong critical care infrastructure is in place to handle the demands placed on our ICUs.

When a natural disaster strikes or a pandemic sweeps the nation, the demands on critical care increase exponentially, and critical care providers and systems will always be on the front lines. Mounting an efficient disaster response depends on the existence of a highly competent critical care workforce, yet the supply of critical care clinicians is grossly inadequate to meet our population needs.

The need for critical care today is outpacing the numbers of qualified clinicians in this field, and the gap between supply and demand will only continue to widen further — by one account, the expected demand for intensivists will outstrip supply by 22 percent in 2020.[ii] With data showing that staffing ICUs with intensivists reduces the risk of patients dying in the ICU by 40 percent, there is no doubt that the dearth of specialist physicians, nurses and other vital clinicians in the ICU delivery system pose a serious impediment to managing ICU capacity surges.[iii] As new challenges such as the Ebola threat remind us, we must embrace policies that anticipate and respond to the need for trained specialists in the ICU. To that end, as the Committee considers high-value initiatives to serve this goal, we encourage funding for programs such as Graduate Medical Education (GME) slots for intensivists and other similar measures because we cannot afford a scarcity of trained, specialized personnel working in our ICUs.

Another important factor in ensuring a strong U.S. critical care infrastructure that can respond to the demands of a public health crisis like Ebola is robust investment in National Institutes of Health (NIH) supported research for the development of new therapies to treat critical care patients, and, more generally speaking, in coordinating and elevating existing research, which itself may not require new funding. While the critical care community has long been proactive in disseminating new knowledge regarding the pathophysiology and effective treatment of critical illness, we, as a nation, have had disproportionally little focus on critical care research. The U.S. still lags behind other countries in establishing and supporting trial networks for the discovery of new therapies for critically ill patients. Further, a recent study published in the *Journal of Critical Care Medicine* found that despite the fact that cancer care and critical care place similar economic burdens on the U.S., "proportionally 3.1-11.4 times more federal research money was spent on cancer care than on critical care research."[iv] The unsurprising result is that relatively few breakthroughs have occurred in critical care medicine compared to other areas of medicine.

The establishment of a Critical Care Coordinating Council within the NIH would have the effect of better prioritizing critical care research and would help to facilitate information sharing amongst the various Institutes. It also would serve to identify critical care research gaps towards which resources could be more appropriately allocated. Such a Coordinating Council

would foster collaboration between the Institutes and strengthen partnerships between the NIH and public and private entities to expand cross-cutting critical care research without costing the Federal government additional money. Given the impact of critical care medicine on the nation, particularly in the face of a public health emergency, the Roundtable believes that a Coordinating Council is necessary to ensure our research dollars are utilized most effectively.

Finally, we urge the Committee to ensure that the existing public health agencies and programs intended to protect the public health have sufficient resources to take appropriate actions in the face of the threat of an Ebola or other biological outbreak, as well as to ensure the overall preparedness of the nation's ICUs. Last year, Congress passed and President Obama signed into law the Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA) which prioritized the nation's critical care system within federal disaster planning efforts for the first time in history. While passage of this legislation marked an important step forward towards enhancing the nation's ability to care for the critically ill and injured in the aftermath of a public health emergency, the fact remains that over the last four years, federal funding for the agencies and programs that help hospitals plan for public health emergencies—including those prioritized in PAHPRA— has continuously been cut. The NIH has lost more than 10 percent of its purchasing power for biomedical research; the Centers for Disease Control and Prevention (CDC) program that supports state and local public health professionals deployed to the front lines during an emergency has been cut by 16 percent; and, perhaps most significantly, the Hospital Preparedness Program (HPP), which supports hospitals and other stakeholders engaged in planning for a public health emergency by, among other things, providing resources for training staff to contain deadly viruses such as Ebola, and running drills and exercises to prepare for patients surges from outbreaks like Ebola has been cut an astounding 44 percent. As a result, our nation's ability to be adequately prepared to mount an efficient and effective medical response during an emergency has suffered.

A recent article from the *Washington Post* highlighted this fact in its report of the experience of Dr. Lewis Rubinson, an ICU doctor and Director of the critical care resuscitation unit at the University of Maryland's Shock Trauma Center, who was exposed to Ebola while working for the World Health Organization in Sierra Leone. Dr. Rubinson, who has collaborated with the Roundtable on Critical Care Policy previously, was subsequently quarantined at the NIH. Since being released, he has spoken extensively of his experience from his perspective as an ICU doctor, highlighting the importance of, and challenges to, developing and disseminating new data regarding the efficacy and safety of new therapies, and the ability of U.S. hospitals to care for patients with Ebola. Dr. Rubinson ultimately concluded that, "We need better strategies…informed by sound science and boots-on-the-ground experience. That's the role of public health."[v] To be sure, preparedness in the ICU, where our nation's sickest patients are being treated, is not about just responding to a crisis as it arises, and we urge the Committee to prioritize funding that enables our ICUs to instead be proactive and plan for such an event so that as episodic, or even regularized, crises arise, our critical care infrastructure is prepared to

respond with the staff, therapies and systems they need to ensure the best possible outcomes for our most vulnerable patients. We thank you for your consideration.

[i] Society of Critical Care Medicine. Critical care statistics in the United States. http://www.sccm.org/AboutSCCM/Public%20Relations/Pages/Statistics.aspx

[ii] Health Resources and Services Administration (HRSA). The Critical Care Workforce: A Study of the Supply and Demand for Critical Care Physicians. May 2006

[iii] Pronovost PJ, Angus DC, Dorman T, Robinson KA, Dremsizov TT, Young TL. Physician staffing patterns and clinical outcomes in critically ill patients: a systematic review. JAMA. 2002; 288:2151-62.

[iv] Coopersmith CM, Wunsch H, et al. "A comparison of critical care research funding and the financial burden of critical care illness in the United States."*Critical Care Medicine* 40 no.4 (2012)

[v] Sellers, Frances Stead. "Exposed: After an accidental needle stab, a doctor's Ebola watch begins" *The Washington Post.* November 3, 2014.