

## Sepsis process and outcomes improvement associated with mandatory reporting



A state-wide mandated public reporting of compliance with protocols to treat severe sepsis and septic shock appears to improve care and reduce mortality, according to new research published online in the American Thoracic Society's American Journal of Respiratory and Critical Care Medicine.

In "Mortality Changes Associated with Mandated Public Reporting for Sepsis: The Results of the New York State Initiative," Mitchell M. Levy, MD, and co-authors report that patients treated according to three- and six-hour sepsis "bundles" – a group of interventions designed to diagnose and treat sepsis and septic shock early – were 15 percent less likely to die than those whose care did not follow the protocols.

In addition, patients who received the sepsis bundles also had shorter hospital stays. At hospitals with the highest rates of compliance with the three-hour bundle, length of stay (LOS) was nearly three days shorter. At hospitals with the highest rates of compliance with the six-hour bundle, LOS was more than a day shorter.

New York State is the first American state to require its hospitals to report to the Department of Health whether sepsis protocols had been followed in treating patients, along with specific patient outcomes. The mandate came about, in part, because of the tragic death in 2012 of an otherwise healthy 12-year-old boy named Rory Staunton from Queens, NY, who had undiagnosed sepsis. The case was widely reported in the New York and national media.

"The reason the state adopted these particular bundles is that our group had published evidence that there was a strong association between compliance with these interventions and improved survival in sepsis," said Dr. Levy, professor of medicine and chief of pulmonary, critical care and sleep medicine at the Warren Alpert Medical School of Brown University.

For this study, Dr. Levy and colleagues reviewed the medical records of 91,357 patients (median age 71) with either condition who were hospitalised at 183 hospitals over the first 27 months of the new reporting mandate (which took effect in April 2014). Over the study period, the researchers noted, the healthcare team increasingly initiated the sepsis bundles.

Overall, the sepsis protocols were initiated in 81.3 percent of patients, most often in the emergency room. The risk-adjusted mortality of these patients was 24.4 percent, compared to 28.8 percent in those not receiving the bundles.

Whether the overall trend towards this kind of reporting has improved health outcomes is a subject for debate, according to the authors. In the case of the sepsis requirement, they wrote that while their study cannot prove a causal relationship between implementation of the protocols and lower mortality, the evidence is nonetheless strong.

"The New York State sepsis initiative provides strong evidence that compliance with sepsis performance measures is associated with improved survival in these critically ill patients," Dr. Levy pointed out. "At least in sepsis, our study strongly supports the value of public reporting of outcomes."

Source: [American Thoracic Society](#)  
Image Credit: ATS

Published on : Thu, 13 Sep 2018