

Electronic Intensive Care Units Enable Provision of Remote Care



A recently published study finds electronic intensive care units (eICUs) to be an efficient tool in the provision of around-the-clock intensive care to patients in remote locations.

Through the use of telecommunications technology an eICU diagnoses and accordingly treats patients in the ICU remotely. Video monitors, two-way cameras, microphones and alarms offer 24-hour monitoring for patients hospitalised in an ICU, and coupled with the skills of intensive care physicians (intensivists) and intensive care nurses eICUs can provide care to patients in multiple hospitals.

Based at the Northside Medical Center in Ohio, a team of researcher evaluated results of interactions with over 2,500 patients admitted to ICUs over a 2-year period. Of these, 1,310 patients were without eICU monitoring, whereas 1,227 were monitored with eICU as well as receiving inhouse monitoring from medical staff.

Two adult ICUs in a 375-bed US community teaching hospital provided the remote location for the eICUs, which utilised intensivists and other health-care providers to provide ongoing monitoring and management.

Measurements were taken on the rate of falls, incidents of code blues, mortalities, and length of stays between the two periods before and after implementation of the eICU.

Specific outcomes encountered by patients with normal vs eICU monitoring showed code blues 54 vs 39, falls 1 vs 0, and overall mortality 90 vs 77. The median length of stay was 3.1 days without eICU monitoring and 3 days with eICU monitoring.

Curtis Sessler, MD, FCCP and president-designate of the ACCP confirmed that providing high level intensive care in remote locations is challenging. Though he welcomed the elCU's unique approach to addressing this need and found the favorable trends in selected outcomes to be encouraging, Sessler acknowledged that more extensive and comprehensive studies are needed.

Source: Science Daily

28 October 2013

Published on: Wed, 6 Nov 2013