

Effect of a pediatric early warning system on all-cause mortality in hospitalized pediatric patients.

August 20, 2018

Parshuram CS, Dryden-Palmer K, Farrell C, et al. Effect of a Pediatric Early Warning System on All-Cause Mortality in Hospitalized Pediatric Patients: The EPOCH Randomized Clinical Trial. JAMA. 2018;319(10):1002-1012. doi:10.1001/jama.2018.0948.

https://psnet.ahrq.gov/issue/effect-pediatric-early-warning-system-all-cause-mortality-hospitalized-pediatric-patients

Identifying incipient <u>clinical deterioration</u> is a prerequisite for <u>rapid response</u> and prevention of harm for hospitalized patients. This study tested a bedside pediatric early warning system, which included an illness severity score, standardized documentation, and monitoring protocols. In a cluster-randomized trial in several high-income countries, implementation of the bundle did not result in decreased in-hospital mortality compared to usual care. The overall mortality rate in the study was less than 0.2%. The authors suggest that this unexpectedly low mortality rate may have made it difficult to detect differences in intervention versus control hospitals. A related editorial suggests that <u>artificial intelligence</u> should be used to identify clinical deterioration and that outcomes beyond mortality should be considered in their evaluation.