Patient Risk Stratification via NEWS: Speaking the Same Language

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Abstract

Early detection, timeliness, and appropriate clinical interventions are all related to improved outcomes in patients who present with acute illness or who are already in acute care and experience deterioration in condition. In an effort to identify and proactively intervene for patients most at risk for deterioration during the acute care encounter, evidence exists to support the use of 'early warning scores' (EWS). A variety of EWS tools exists, each routinely scoring patient risk using physiologic parameters typically collected and monitored by nursing staff during acute care visits. Each tool additionally defines a score that represents the urgency and type of clinical response required. Our facility had no risk tool in place. While planning to implement such a risk stratification tool, the research efforts of a clinical team discovered the National Early Warning Score (NEWS) tool. This tool was developed for use in the United Kingdom by a task force recommendation from the Royal College of Physicians. The tool, published in 2012 and updated in 2015, allows standardized and routine clinical assessment of all adult patients over age 16 using a minimum set of physiologic parameters. This tool advocates standardization in risk scoring across all patient types (excluding pediatrics and obstetrics) using six physiologic parameters, as well as standardization of interventions based upon risk level. Implementation of the NEWS tool in an automated fashion directly in the Electronic Medical Record (EMR) includes presentation of alerts when the patient risk score reaches certain levels, visibility of the parameters that contributing to the score, and the ability to record the interventions put into place or to automate a Rapid Response Team call. The implementation has allowed an evidenced based, standardized early warning risk stratification scoring tool for our organization that has resulted in: 1) Implementation of a tool not previously in place; 2) Improved surveillance of unplanned transfers to the ICU; 3) Improved surveillance of Code Blue calls outside of the ICU; 4) Improved surveillance in the use of Rapid Response Teams for early intervention. Additionally staff can view the patient risk score in a variety of areas in the EMR to observe trends and share the information during staff/shift handoff to further impact patient safety via patient-generated data that contributes to clinical decision making