M2SEWS Early Warning System & Proactive Screening Provides Early Intervention & Escalates Care

Patricia McCabe, RN, MSN, CCRN; Janet Thorne, RN, MGA; Suzanne Wilson, MS; Andrea Ryan, RN, MSN; Molly Sarumi, MD; Hank Rappaport, MD; and Joseph Blumenthal, MS

Problem Statement: The use of Early Warning Systems to identify patients at risk for deterioration has been used for over a decade. The criteria and parameters used in these early warning systems vary by institution and area of focus; however, some parameters are common to most systems. Our hospital uses a hybrid system that includes laboratory values as well as hemodynamic parameters as part of a screening tool called the M2SEWS Early Warning System to proactively identify patients at risk for deterioration and describe various interventions that this team uses. The screening tool has improved outcomes though early identification and treatment. **Methods:** We developed, refined, & implemented an electronic clinical decision support tool with a real-time alert and monitoring system on medical/surgical units. A review and comparison of hospital and UHC data for mortality as well as volume metrics associated with emergency responses and proactive screening activities as reported by the critical care nursing team will be used to correlate a causal relationship as well as identify best practices. **Results:** As the validity of data from our Early Warning System has been refined, the use of proactive screening has led to a reduction in hospital mortality from 2.5 to 1.18 and reduction in sepsis mortality from 35% to 18%. The Nurse Responder Team screens, on average, 225 patients a month. These screens result in bedside interventions that include Rapid Response calls and oftern movement of these at risk patients to a higher level of care. **Significance:** The development and use of a reliable early warning system with real time unit alerts combined with a dedicated critical care nursing team that uses this data to identify patients at risk can significantly impact mortality & patient outcomes.