



Summer Institute in Nursing Informatics 2019
Podium Presentation



Applying Predictive Analytics to Support Transitions of Care

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Placing patients in the right bed does not end on admission, as patients' conditions change. Our facility implemented a predictive analytics tool (Rothman Index) to reduce mortality by early detection of clinical decline. Timely escalation to critical care improves the patient's chance of survival. Further, monitoring the patient's trend on the Rothman Index helps to identify patients in critical care who have stabilized and are ready to be downgraded to acute care, freeing up essential resources. This same tool has been used to identify heart failure patients at risk for readmission. Through clinical integration of the Rothman Index in shift report, multidisciplinary rounds, and proactive rounding, the rate of unplanned transfers to the ICU decreased 32% as compared to pre-implementation. Rapid Response Team (RRT) calls continue to trend upward, indicating improvement in identifying clinical decline. The mortality rate trended downward in the first six months of 2018 from 2.42% to 1.86%, with the sepsis mortality rate dropping from 25.49% to 16%. The presentation will describe implementation of the Rothman Index in an urban teaching hospital with a focus on continued efforts to improve clinical integration and transitions of care.