



Use of a predictive tool, the Rothman Index, to reduce 30-day readmissions

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Problem Statement: Nationally, one-in-five Medicare fee-for-service beneficiaries are readmitted within 30-days of discharge at a cost of \$26 billion dollars annually. Thirty-day readmissions may be related to quality of care received during hospitalization. The organizational goal at the project site is to reduce the readmission rate in the Medical Intensive and Intermediate Care Units from 30% to 12.5% or less. **Methods:** The Rothman Index (RI) is a predictive warning system embedded in the electronic medical record (EMR) that has been validated in risk prediction for 30-day readmission. The RI uses clinical data from the EMR, including nursing assessments, vital signs, and lab values to generate a universal score predictive of discharge readiness. The study question was whether use of the Rothman Index (RI) in discharge decision-making reduced 30-day all-cause readmissions in-patients discharged alive from Medical Intensive or Intermediate Care Units (MI/IMCU), compared to patients discharged from the MI/IMCU without use of the RI. **Synthesis of Evidence including the EBP Model:** The Johns Hopkins Nursing Evidence-Based Practice Model was used as a framework to guide this project from evidence appraisal through translation. **Results:** Studies show that early warning systems may predict patients at risk for 30-day readmission. After a review of evidence, the RI was chosen as the best warning system. As a result, there is a practice recommendation that the RI should be used in all handoff communications among nurses and during RN-MD rounds to determine discharge readiness or the need for additional resources at discharge. Practice changes that were made include the update of nursing documentation guidelines. Multifaceted education was provided to the nurse and provider staff. The RI was integrated into decision-making when determining readiness for discharge. Outcome metrics include 30-day readmission and use of the RI in discharge decision-making. **Significance:** Data will be collected through February 2016 and compared to baseline data to determine effectiveness of the RI in discharge decision-making.