

Public Abstract

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Title:INFORMATION TECHNOLOGY USE IN PREDICTION OF RAPID RESPONSE EPISODES, PRESSURE ULCER STATUS, AND 30 DAY READMISSION

Adverse events continue to be high priorities in healthcare. Reimbursement changes have tied prevention of adverse events to advancements in health information technology. Accordingly, early warning systems have been incorporated into the electronic health record (EHR) of many hospitals. Although early warning systems, such as the Rothman Index (RI), address risk identification, no such system has been used to assess pressure ulcer risk.

This research examined whether the RI would be useful for the prediction of pressure ulcer (PU) risk, PU presence at discharge, rapid response episode occurrence, and unplanned hospital readmission within 30 days. This study of 7567 adult medical-surgical patients' less than or equal to 18 years of age was a secondary analysis of a limited data set from a rural, Midwestern, not-for-profit, community hospital. The Braden Risk Assessment Scale (BRAS) and RI risk scores upon discharge were strongly correlated. Patients discharged with a PU had a longer hospital length of stay, greater frequency of rapid response episodes (emergent procedures to rescue the patient prior to life-threatening episodes), lower BRAS and RI risk scores, and greater frequency of readmission within 30 days of discharge than those without a PU. Readmission within 30 days of discharge was associated with PU presence at discharge. Addressing the wound care needs of patients admitted with a PU may help decrease hospital length of stay, rapid response episodes, and hospital readmission rates. The RI may assist in identification of patients at risk for adverse events, guide healthcare providers in the personalization of the patient's healthcare experience and improve healthcare outcomes.