

Introduction

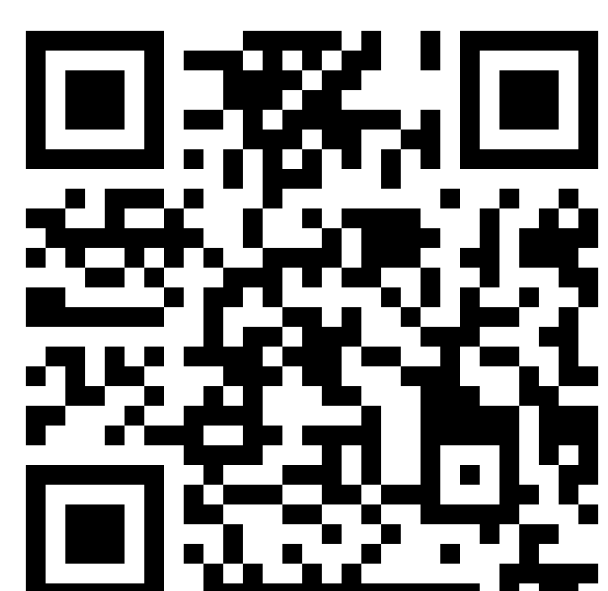
Background and Significance

- Post-intensive care syndrome (PICS) is a complex occurrence of cognitive, physical, and psychological dysfunction occurring after admission to a critical care setting. (Preiser et al., 2020).
- Currently there are limited screening tools to identify a patient's morbidity risk of developing PICS after discharge.
- Multiple risk factors contribute to the development of PICS including but not limited to age, comorbidities, severity of ICU illness, development of delirium and its duration, and development of sepsis (Desai et al., 2011).
- The development of delirium and the duration of delirium is among the greatest contributor to cognitive impairment post-ICU discharge (Pandharipande et al., 2013).
- Post-intensive care syndrome has a significant role when examining the rate of readmission after discharge from the acute care setting. Patient who experience PICS are at a significant risk for readmission before 30-days (Bloom et al., 2019).

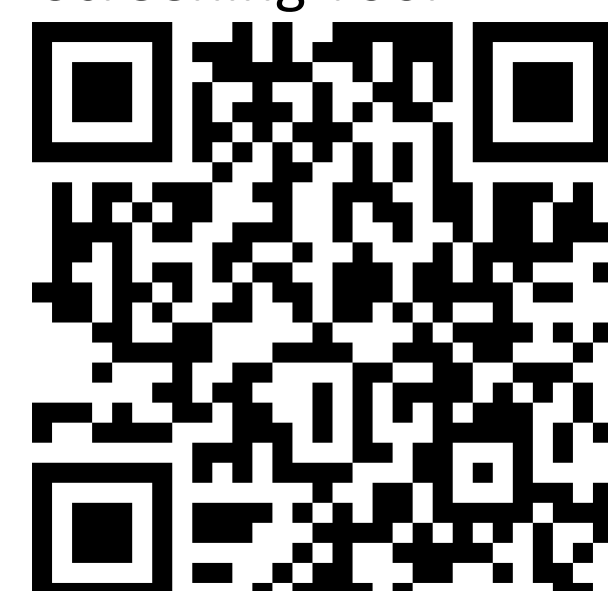
Purpose

- To increase awareness and improve recognition of risk factors of Post-Intensive Care Syndrome in the inpatient setting and impact the plans of care to mitigate long-term complications associated with critical illness.
- Development of a screening tool for known PICS risk factors identified in current literature for future validation of the screening tool for long-term in patient use.
- To assist in identification of at risk patient population for PICS.
- To improve referral rate and process to the Post- ICU Clinic for coordinated follow up.

References



PICS Risk Factor Screening Tool



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Methodology

Design: Quality improvement project, pilot study which utilized retrospective chart review to collective quantitative pre-and post-intervention data of the PICS risk factor screening tool.

Setting

- A suburban, Magnet® designated, 735-bed, Level I trauma center in northern New Jersey
- The unit this study was conducted in was a 12-bed Medical ICU

Sample

- Pre-intervention sample of 30 patients and post-intervention sample of 30 patients, totaling 60 patient participants
- Post-intervention sample $n= 26$

Intervention

- Pre-intervention, 30 chart reviews or 28 days of chart review to establish risk factor prevalence
- Following education, 30 patient screenings or 28 days of screenings performed with discharge or change in level of care orders to assess for PICS risk factors and trigger referral to a Post-ICU Clinic
- Referral order for patient who screened positive for PICS risk factors by medical residents and attending physicians

Outcomes Measured

- Prevalence of risk factors associated with PICS that have been identified in the literature
- Number of criteria met for each patient participant
- Demographic information and their association with PICS risk factors
- Rate of referral for patient participants that screened positive for any risk factors associated with PICS

Results

- Pre-intervention data revealed the risk factors identified in the review of the literature exist in the Medical ICU population.
- The average length of stay at time for screening for male patients ($n=12$) was 8.5 days and female patients ($n=10$) was 8.7 days.
- The average age for male patients ($n=12$) was 66.58 years and female patients ($n=10$) was 68.2 year
- Of the 26 patients screened 15.38% ($n=4$) patients met zero criteria, 61.53% ($n=16$) met one criteria, 15.38% ($n=4$) met two criteria, 7.69% ($n=2$) met three criteria, 0 patients met four or all five criteria.
- The data collected from the post-intervention period correlated closely with the pre-intervention screening regarding prevalence of risk factors. Sepsis and a positive CAM-ICU delirium score were the two most common independent risk factors that contributed to referral placement. Gender did not seem to play a role in rate of referral or risk of PICS development.

Discussion

Conclusion

The aim of this study was to illustrate that PICS risk factors exist in the Medical ICU population, demonstrate that early screening can be performed in the acute care setting, and improve referral rates. This quality improvement initiative established that patients often had more than one risk factor at time of screening and valid scales for the identified risk factors can be utilized to identify patients that would benefit from coordinated follow up.

Implications for Practice

The data collected from the PICS risk factor screening tool should be considered valuable as many of the risk factors are measured utilizing widely accepted scales, suggesting that the data is not subjective to the primary nurse.

Future Practice

Future evaluation is needed in the outpatient setting in order to validate that the risk factor screening tool can adequately target patients in the acute care setting to support coordinated post-discharge resources to aid in mitigation of long-term complications of PICS.

Results

