

POSTER PRESENTATION

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Do acutely admitted medical patients comply with the Appropriateness Evaluation Protocol?

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Background

The majority of medical patients are admitted unplanned and increasingly more patients are admitted to medical departments. But are these admissions all relevant?

The Appropriateness Evaluation Protocol (AEP) is an international renowned scoring system that can be used as a marker for the relevancy of unplanned admissions.

Our aim was to clarify how large a proportion of the acutely admitted medical patients at our hospital that comply with the AEP criteria.

Methods

All patients admitted from October 2nd 2008 to February 19th 2009 were prospectively included. Only patients immediately transferred to a hospital with a higher level of care were excluded.

Upon arrival a nurse registered vital signs and a doctor completed a form on the AEP criteria. Blood tests and information regarding treatment were extracted from the hospital computer systems.

In case of missing information we performed a review of the admission notes and the nurse's notes. In spite of this, we have missing information on EKG in 1,180 patients and fever for more than five days in 166 patients.

Data are presented as median (IQR) or proportion. Differences in groups are analyzed using Chi-squared or Wilcoxon Rank-Sum test.

Results

A total of 3,050 patients were included. 1,463 female (48.0%), median age 66 years (IQR: 50-77). Median

length of stay 28 hours (IQR: 12-121), 84 patients died (2.8%).

1,889 complied with the AEP criteria (62.2%). 51.1% in cardiology and 67.7% in internal medicine ($p < 0.001$). There were no difference on the proportion on different days ($p = 0.22$), but a small variation on time of day ($p < 0.05$). Among patients admitted for more than 48 hours, 75.5% complied with the AEP criteria, but among patients discharged before 48 hours, 52.0% complied ($p < 0.001$).

Patients complying with the AEP criteria had a significantly higher in-hospital mortality, longer admission, increased risk of re-admission within 30 days after discharge and increased risk of mortality within 30 days after discharge.

Conclusion

Our data show that acutely admitted medical patients complying with the AEP criteria had a higher mortality, were admitted longer and were readmitted more frequently than patients not complying.

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