

Abstract 067

Category: Research on nursing diagnosis

TITLE: Nursing diagnoses as predictors of hospital length of stay in internal medicine

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Introduction:

Length of stay (LOS) is an essential variable to assess the quality of care and performance of hospitals. Models adopted to explain LOS are mostly based on routinely collected medical data, such as disease groups and morbidity indexes. Patient complexity measures should be included to improve the performance of these models.

Methods:

This study employed a prospective observational design. Data were collected from July to December of 2014 in an internal medicine hospital unit. The number of nursing diagnoses was considered a measure of nursing complexity on admission. A linear regression model was performed to predict LOS using the following independent variables: age, gender, number of nursing diagnoses, All Patient Refined Diagnosis Related Groups (APR-DRGs) weight, the Charlson comorbidity index, and modality of admission (scheduled or unplanned).

Results and discussion:

A sample of 890 patients (mean age 63.6, male 53.1%) was enrolled. The mean LOS was 7.3 days (SD 5.8). The regression model explained about 35% of the LOS variance ($p < 0.001$). The number of nursing diagnoses was an independent predictor of LOS ($\beta = 0.20$; $p < 0.001$). The integration of nursing diagnoses in the predictive model improved the explained variance of the hospital LOS.

Impact on the discipline:

Predictive models based exclusively on medical data do not exhaustively explain hospital LOS. Systematically collected standard nursing data, such as nursing diagnoses, should be integrated into predictive models to explain the contribution of nursing complexity to hospital outcomes. This could form a basis to also involve nursing practice in refining hospital reimbursement systems.

References

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