



Impact of Transfer Status on Hospitalization Cost and Discharge Disposition for Acute Ischemic Stroke Across the US

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Introduction

In this study, we utilized information provided in the Nationwide Inpatient Sample (NIS) to study the impact of transferring stroke patients from one facility to a center where they received some form of active stroke intervention (intravenous tissue plasminogen activator, thrombectomy, or a combination of both therapies).For the first time we incorporated the patient clinical condition(APR-DRG) in our analysis. It is important to understand the advantages in transferring a patient to a comprehensive stroke center as recent trials (MR CLEAN, EXTEND-IA, ESCAPE and SWIFT PRIME) has shown the superiority of intra-arterial treatment of stroke.

Methods

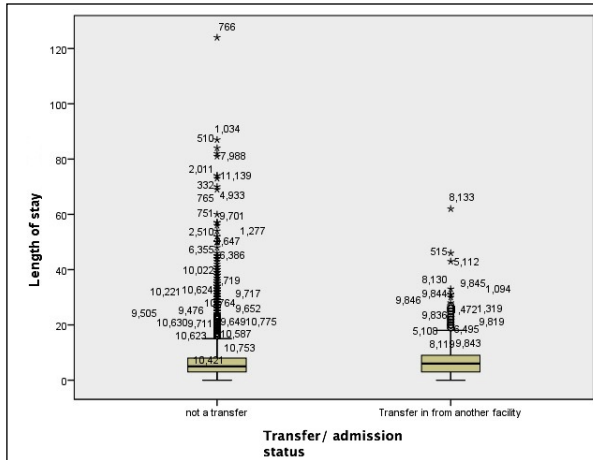
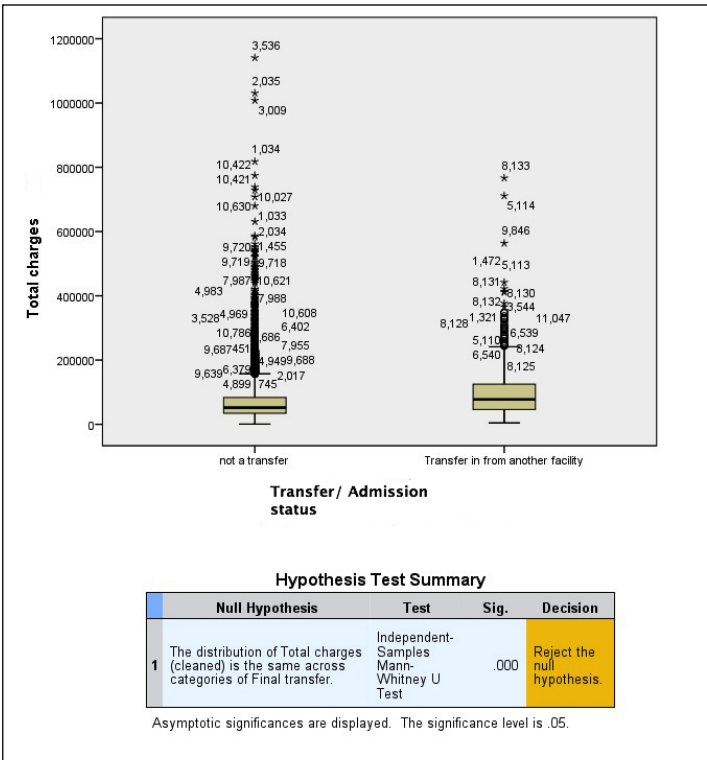
We analyzed patient demographic and hospital factors obtained from 2008–2010 acute stroke NIS data. Discharge-disposition, hospitalization cost, and mortality were the dependent variables studied. Univariate analysis and multivariate binary logistic regression analysis were performed. We focused our data analysis on the cohort of acute stroke patients who received some form of active intervention (55,913 of 1,311,511 patients in the NIS).

Results

When overall outcome was considered, transferred patients had a significantly higher number of other-than-routine (OTR, meaning other than discharge to home without home healthcare) discharge dispositions (p<0.0001). In multivariate-regression analysis including pertinent patient and hospital factors, transfer-in patients had significantly worse OTR discharge disposition (p<0.0001, OR 2.575, CI

Conclusions

Our study showed that hospital cost for acute stroke intervention is significantly higher for a transferred patient than for a direct admission. Moreover, the frequency of OTR discharge was significantly higher among transferred patients than direct admissions. Future strategies should focus on ways and means of transporting patients appropriately and directly to stroke centers.



Learning Objectives

1. Patents that are directly admitted to comprehensive stroke centers do better, than those who are transferred from an intermediary hospital.
2. Cost of hospital;assertion is less in patents that are directly admitted to comprehensive stroke centers than those who are transferred from an intermediary hospital