

Comparison of Transfer Patterns by Emergency Medical Services in Trauma Patients in a Major U.S. City.

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Background:

Trauma patients are often unable to communicate a preferred destination hospital to EMS due to their injuries and potentially decreased level of consciousness. The destination hospital is thus determined by the EMS team transporting the patient. This study focuses on trauma admissions between Eskenazi and IUH Methodist Hospitals in downtown Indianapolis, both of which are Level 1 trauma centers within one mile of each other. We are interested in identifying differentiating factors between patients that are admitted at these two hospitals, focusing on the injury type as well as the demographic information for each patient, to determine if there are differential transport patterns.

Methods:

We performed a retrospective analysis of patient charts and transport documentation to determine basic demographic and admission data for each patient. We especially took note of the location of EMS pickup, the facility the patient was taken to, and the stated reasons for taking the patient to that specific facility. A simple Google Maps search allowed us to determine if the patient was taken to the facility closest to them, or not.

Results:

We found that among the included patients that were not taken to the nearest Level 1 trauma center, a significant majority were taken to Eskenazi rather than Methodist. Among these patients, a majority were minorities, in contrast with demographic makeup of the patients that were admitted to the closest trauma center.

Conclusion:

This study highlights how complex EMS transfer patterns are based upon diversion, traffic, individual driver preference, and other factors. There is a significant difference in transport patterns between the two hospitals that correlates with a difference in patient demographics.

Policy Implications:

This data indicates a need to monitor these numbers closely going forward, paying special attention to all possible reasons that could impact to which facility a patient is admitted.