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Ft al.

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Racial Disparities in In-hospital Mortality and Discharge Disposition among Trauma Patients in Massachusetts

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### **Background**

Population-based data on trauma care are important to a solid understanding of racial disparities in the care and outcomes of trauma patients.

#### Methods

Data on inpatient hospitalizations for trauma were obtained from the Massachusetts (MA) Statewide Trauma Registry which conducts annual census of trauma-related hospitalizations in MA. This analysis included patients who were MA residents and admitted to a MA hospital between 2008 and 2010, and 15 years and older at the time of admission. Patients were grouped as non-Hispanic white, non-Hispanic black, Hispanic, Asian, and other or unknown race. Injury severity, discharge disposition and mortality of the first hospitalization of the patients were compared among the groups while adjusting for sex, age and severity.

#### Results

The data were from 23,666 patients with a mean age of 63.8 years. The patients included 51.8% women, 86.1% whites, 4.3% blacks, 5.6% Hispanics, 1.2% Asians and 2.7% other or unknown races. In total, 597 (2.52%) died in the hospital. Asians and other races had higher risk for death (OR=2.96, p<0.001; OR=2.28, p<0.001; respectively) than whites. Among survivors, there were no significant differences in disposition between blacks and Hispanics. However, compared to whites, blacks and Hispanics were discharged more likely to home (59.9% vs. 29.0%, p<0.001), and less likely to a post-surgical care or rehabilitation facility (22.6% vs. 52.6%, p<0.001).

#### Conclusions

Remarkable racial/ethnic disparities in inhospital mortality and discharge dispositions were seen among trauma patients in MA. The determinants of the disparities and related policy implications are under investigation by a study supported by the National Institute on Minority Health and Health Disparities.

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