Emerging Disparities among Self-Pay Trauma Patients

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Abstract

Preliminary results from a study of trauma patients in Southern Nevada are yielding some unexpected findings with implications for both trauma centers and the growing Hispanic population. Hispanic patients are more likely to be self pay irrespective of income level and employment status when compared to non-Hispanic patient groups. Further, self pay Hispanics, unlike their non-Hispanic, self pay counterparts, tend to be employed, have families, and report stable living conditions. The implication is that the financial and social cost of traumatic injury may place a significant burden on trauma centers, patients, their families and the community.

Key Words: traumatic injury, health insurance, uninsured, Hispanics

Introduction

As the cost of health insurance continues to escalate, increasing numbers of uninsured patients present to hospital emergency departments with traumatic injuries, advanced stages of disease, and significant co-morbid conditions from lack of preventive care. Unlike many other hospital services, the full complement of trauma center services must be immediately available at all times. In addition to the immediate availability of a staffed operating room, trauma center services include personnel in emergency, radiology, surgery and other departments. Many of these extra expenses are not reimbursed, and as the number of uninsured trauma patients increases, these expenses significantly impact a hospital’s financial situation (Lanzarotti et. al., 2003). One recent study (Fantus and Fildes 2005) used 2004 data from the National...
Trauma Database (NTDB™) and found that uninsured or self-pay patients represented over twenty percent of records in that database.

In Nevada, many of these uninsured patients are Hispanic. Nationally, low-income Hispanics account for 19% of the uninsured population and 29% of the low-income uninsured. A study by the Urban Institute found that 53% of low-income Hispanics lack health insurance (Holahan & Brennan, 2000). In Nevada in 2004, Hispanics accounted for 22% of the population (higher than the US average of 14%), and accounted for 40% of uninsured patients (Mosely and Sotero, 2007). The potential economic and social consequences for trauma centers and for patients, families, and communities are cause for concern.

Methods

Over a three month period in 2006, 291 trauma patients admitted to a southern Nevada Level I trauma center for 48 hours or more, participated in a prospective observational study. Data was collected from questionnaires, hospital registration information, and the trauma database to obtain information regarding demographic characteristics, payer status, type of injury, and hospital resource utilization of both self-pay and insured trauma patients. Interpreter services were utilized as needed. Institutional Review Board approval was obtained for this study. This research brief includes only data from questionnaires. Findings from the full study are forthcoming and will triangulate data from the three sources listed above.

Preliminary Findings

It is clear that in Nevada, as elsewhere, Hispanics are far more likely to be uninsured than their non-Hispanic counterparts (p<.0001). However, comparisons between Hispanic and non-Hispanic self-pay and insured patients are revealing some unexpected findings. Differences between non-Hispanic (regardless of race), self-pay and insured patients are evident across an array of demographic indicators. Among white, black, and Asian patients, those who are self-pay are more likely than the insured to be male (p<0.0229), young (p<0.0001), unmarried (p<0.0016), and to have an annual household income of less than $30,000 (p<0.0001).

Among Hispanics, however, we found no differences between self-pay and insured patients on many of these same indicators. Self-pay Hispanic patients are just as likely as insured Hispanic patients to be employed, have a high school or better education, be married, and have one or more dependents. While self-pay Hispanic patients are less likely to be employed in professional jobs (p<0.0005) than Hispanics who were
insured, they are just as likely as insured patients to be employed as both semi-skilled and skilled workers.

The most surprising finding thus far is that Hispanic patients are more likely to be self-pay, regardless of income. In the less than $30,000 annual income level, Hispanics were 70% more likely to be self-pay (RR=1.67; X²=12.7, p<0.001) and in the $30,000 and above income level, they were 140% more likely to be self-pay (RR=2.4; X²=5.87, p<0.025).

**Discussion**

This study is being conducted to better understand the demographics and socioeconomic attributes of insured and uninsured trauma patients and the impact on trauma care systems. While the demographics of self-pay patients overall and among non-Hispanics confirmed many common perceptions, disparities with respect to medical insurance status were revealed for Hispanic patients. In particular, the finding that among those who had incomes of $30,000 or above, Hispanic patients were 140% more likely to be self-pay than white or black patients was unexpected.

Study hypotheses initially focused on the economic and service implications for trauma centers. However, the preliminary findings are allowing us to ask a different set of questions and are raising issues not previously considered. With greater than 85% of Hispanic patients being employed but not insured, the high cost of trauma care and rehabilitation has the potential to financially devastate families. There may also be implications for the workforce and the community, particularly given the high number of Hispanic workers known to work in high-risk employment in Nevada, such as construction and mining. A study to examine the workforce, family, and community implications of injury among Hispanics is now under development.

**References**

Fantus, RJ; Fildes JJ. 2005 Can we insure the future of trauma? Bulletin of the American College of Surgeons.


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