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Title

Demographic Differences in Hospital Readmissions , Hospital Length of Stay and Emergency Room Visits among Homeless Patients

Priority 1 (Research Category)

Social determinants and vulnerable populations

Presenters

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Abstract

Context: Due to lack of insurance and permanent housing, homeless Americans are relegated to using emergency rooms and hospitals for primary care. However, little is known on the impact of age, race and sex in the pursuit of healthcare in this population.

Objective: This project aims to raise awareness on health care access among homeless Americans, but to also recognize the nuances in which systemic biases affect their access to care.

Study Design & Analysis: Retrospective case controlled study with logistic regression and negative binomial analysis.

Setting/Dataset: Data from 7 HCA hospitals in the southeastern U.S. from January 2017 – August 2022.

Population Studied: Homeless and non-homeless patients.

Intervention/Instrument: Data acquisition performed via Enterprise Data Warehouse database and statistical analysis performed by HCA statistician.

Outcome Measures: The primary outcomes were the rates of hospital readmissions, increased length of stays and emergency room (ER) visits among homeless patients. We further examined the demographic differences of these outcomes.

Results: 2,081 encounters of homeless patients and 2,155 encounters of non-homeless patients served as the two populations of study. Compared to non-homeless patients with similar disease burden, homeless patients were 2.17 times more likely to use the ER. Additionally, when controlling for other variables, homelessness increased the length of hospital stay by a factor of 4.03. Despite longer hospital stays, homeless patients were 30% more likely to be readmitted to the hospital within 30 days. However, the demographic differences in this data is compelling. Younger homeless patients were more likely to use the ER by a factor of 1.03 for every 1 year decrease in age. Furthermore, female-identifying homeless patients used the ER 33% less often and were 25% less likely to be readmitted to the hospital

than those who were male-identifying. Finally, Black homeless patients were 53% more likely to use the ER, yet tended to have shorter hospital stays than their non-Black counterparts.

Conclusions: Homeless patients face significant barriers to health care, which are further impacted by demographic differences. Interdisciplinary care amongst physicians, case management and public health professionals have been shown to address these health disparities. Such efforts should be encouraged to improve access to community resources and continuity of medical care in this population.