

# Research Brief



**HEALTH, EMPLOYMENT & LONGEVITY PROJECT** 

# Costs of Healthcare Services among High Utilizers of Healthcare Services Over the First 10 Years after Spinal Cord Injury (SCI)

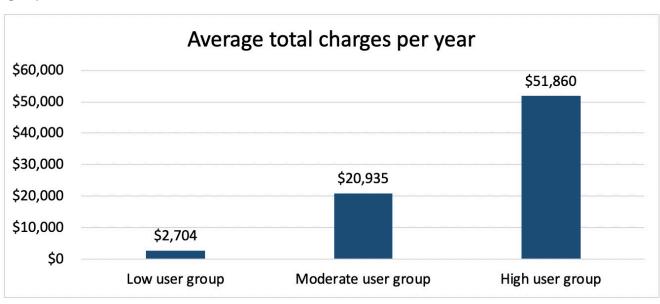
### Introduction

People with spinal cord injury (SCI) have high rates of being re-hospitalized or visiting the hospital emergency department (ED). The purpose of our study was to find the causes of hospitalizations and the types of people with SCI who use the most services.

We had 303 participants, most being male (71%) and white (60%). We used administrative billing data for the cost and causes of hospitalizations. We also had the participants fill out a survey about themselves, and their behaviors, health status, and access to healthcare. From this information, we were able to identify who is most likely to use costly healthcare services.

## **Key Research Results**

- Total hospital charges for these participants were \$49.4 million over the 10-year period.
- The primary hospital diagnoses were septicemia, UTI, complication of a device, and pressure ulcers.
- Participants fell into 3 categories:
  - o Low use costly healthcare (53% of the participants)
  - o Medium use of costly healthcare (30% of the participants)
  - o High use of costly healthcare (16.5% of the participants)
- The high use group had an average 9.6 inpatient hospitalization days per year and 2.6 ED visits per year.
- High users were more likely to be male, nonwhite, have a severe SCI, have a lot of pressure ulcers, and have income of less than \$35,000 per year.
- As seen below, average total hospital charges ranged from \$2,704 in the low use group to \$51,860 in the high use group.



# **Conclusions & Implications**

Our study found that most of inpatient charges were for a relatively small portion of participants (69% of the charges were among the "high users" who made up only 16.5% of the cohort). Therefore, efforts to prevent health problems should be aimed at people who are high users of costly healthcare.

#### Reference

Krause, J. S., Murday, D., Corley, E.H., & DiPiro, N.D. (2018). Concentration of Costs among High Utilizers of Healthcare Services over the First 10 Years after Spinal Cord Injury Rehabilitation: A Population-based Study. Archives of Physical Medicine and Rehabilitation.

#### Support

Supported by grants from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) (grant no. 90IF0119 and 90DP0098) and the South Carolina Spinal Cord Injury Research Fund (SCIRF) (grant no. 09-001). NIDILRR is a center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this alert do not necessarily represent the policy of NIDILRR, ACL, HHS, or SCIRF and you should not assume endorsement by the Federal Government or state of South Carolina.