



## Prevalence of chronic health conditions and hospital utilization in adults with spinal cord injury: an analysis of self-report and South Carolina administrative billing data

### Introduction

Traumatic spinal cord injury (SCI) often results in physical disability and an increased risk of long-term health complications, including chronic health conditions (CHC). The objectives of the study were to : (1) Identify the self-reported prevalence of seven chronic health conditions (diabetes, heart attack, heart disease, stroke, high blood pressure/hypertension, high cholesterol and cancer) in adults with SCI, (2) Examine the relationships between the presence of CHC with future hospital admissions and total number of inpatient days and (3) identify predictors of hospital utilization. In this study, 787 participants completed self-report assessments (SRA).

### Key Findings

- In all, 40.5% reported no CHC; 23.4% reported one CHC and 36.1% reported having two or more CHC.
- The most commonly reported CHCs were hypertension (43.1%), high cholesterol (32.2%) and diabetes (15.8%).
- In total, 59% had at least one hospital admission in the year following the completion of the SRA.
- The average total of inpatient days was 15.7.
- Predictors of hospital admission included number of CHC, pressure sores, education, prior hospitalization and injury severity. With the exception of CHC, each was also associated with total number of inpatient days.

### Conclusions & Implications

Chronic health conditions (CHC) were frequent and more than a third of the study participants reported having more than two CHC. As the number of CHC increased, so did hospital admissions. Although we observed a substantial number of hospital admissions, we have yet to analyze the associated costs. Utilization of health services is a critical topic in understanding costs and patterns of care after SCI. In the USA, the costs associated with CHC exceed \$100 billion annually, and a disproportionate, 71% share of the nation's health care costs is attributed to multiple chronic conditions (MCCs). Future analysis of cost data is necessary to identify the costs associated with CHC hospitalizations and create treatment strategies to prevent costly outcomes in individuals with SCI.

**Reference:** DiPiro, N, Murday, D, Corley, E, Krause, J. Prevalence of chronic health conditions and hospital utilization in adults with spinal cord injury: an analysis of self-report and South Carolina administrative billing data, International Spinal Cord Society online: 8 August 2018. This article contains full references to all pertinent information, including details of previous research by other investigators, instruments used, and more detailed findings.

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