



Research Brief

Differences in Personal Characteristics and Health Outcomes Between Ambulatory and Non-Ambulatory adults with Traumatic Spinal Cord Injury

Introduction

There are approximately 300,000 Americans living with a spinal cord injury (SCI), with varying causes, time since injury, and level and severity of injury. Subgroup divisions may be made based on levels of functioning and disability, for example by functional motor scores, or whether an individual is able to walk or unable to walk. While there are noticeable differences, there has been limited comparing the characteristics of those with chronic SCI who are able to walk to those who are not. Research is necessary to better understand how the ability to walk relates to long-term health and well-being. There is limited understanding of the impact of long-term walking ability or how differences in personal characteristics between those who walk and those who do not may be related to health outcomes. The purpose of this study is to identify differences in personal characteristics, health outcomes, and hospital utilization as a function of ambulatory status among adults with chronic SCI.

Key Findings

- There were 706 walking and 345 non-walking participants.
- We found that those who walk were more likely to be white, married, living in urban locations, and uninsured.
- There were significant differences in the percentage of walking adults with cervical (71%), thoracic (15%) and lumbar/sacral (14%) level injuries compared to non-walking (50%, 44%, and 6%, respectively)
- Those who could walk had fewer emergency department (ED) visits (36% vs 44%), fewer inpatient admissions (IP) through the ED (11% vs 25%), fewer IP only admissions (9% vs 19%), and spent fewer days in the hospital for both admissions through the ED (0.9 vs 4.6 days) and IP only admissions (0.7 vs 3.1 days).
- Walking participants also reported having fewer past year ED visits (44% vs 62%) and IP admissions (34% vs 52%).

Conclusion

Despite the commonality of having an SCI, we identified differences in personal characteristics, ED visits, and IP admissions between walking and non-walking adults with SCI, providing a better understanding of the characteristics of those with SCI. The findings suggest the need for separate analyses based on walking status when assessing long-term health outcomes including hospital utilization.

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