

United Spinal Association is the largest non-profit organization, founded by paralyzed veterans, dedicated to enhancing the quality of life of all people living with spinal cord injuries and disorders (SCI/D), including veterans, and providing support and information to loved ones, care providers and professionals. United Spinal has over 70 years of experience educating and empowering almost 2 million individuals with SCI/D to achieve and maintain the highest levels of independence, health and personal fulfillment. United Spinal has over 50,000 members, 52 chapters, close to 200 support groups and more than 100 rehabilitation facilities and hospital partners nationwide including 10 distinguished Spinal Cord Injury Model System Centers that support innovative projects and research in the field of SCI. United Spinal Association is also a VA-recognized veterans service organization (VSO) serving veterans with disabilities of all kinds.

According to the National Spinal Cord Injury Statistical Center, approximately 17,700 new SCI cases occur each year in the United States. Spinal cord injury (SCI) is an injury to the spinal cord that results in temporary or permanent motor, sensory, and autonomic dysfunction. People who sustain a spinal cord injury often have permanent and profound neurologic deficits and accompanying disability including paralysis or weakness, lack of sensation and cardiovascular dysfunction. As a result, people with SCI may experience a number of secondary conditions such as loss of bowel and bladder control; respiratory problems (due to paralysis of muscles used for respiration), spasticity, osteoporosis, pressure sores, and cardiovascular dysfunction. Preventing or decreasing secondary complications associated with SCI is an important focus of rehabilitation and lifelong care to enhance health related quality of life.

The mortality rate of individuals living with SCI is significantly higher than their non-SCI peers and has remained unchanged since the 1980's. Persons living with SCI are significantly more likely to incur a variety of disease states including cardiovascular disease, diabetes, and stroke. Powered exoskeletons have been developed to restore and improve mobility while enabling full weight-bearing when standing or walking. In turn, walking and weight-bearing provide individuals with many secondary health benefits such as improved bowel and bladder function, reduced utilization of pharmaceuticals and improved cardiovascular function. The benefits of increased physical activity are well documented and translate into significant improvements in health outcomes and decreased utilization of high healthcare costs. Exoskeletons have the potential to enable more than 40% of the SCI population, that is - incomplete and complete paraplegics - to resume ambulation, which can lead to a healthier and improved quality of life.

Across the continuum of care, United Spinal supports the foundational goals of safety and efficacy for individuals with spinal cord injury when using a powered exoskeleton. We have reviewed current peer-reviewed medical literature on the use of exoskeletons in the rehabilitation and home settings, comprising 18 publications totaling 269 individuals.

The literature amply demonstrates that the benefits in improved health outcomes from walking with powered exoskeletons significantly outweigh the minimal risks the literature associated with the assistive devices. United Spinal strongly encourages the use of exoskeletons for eligible individuals to help restore functional walking and to reap the health benefits that accrue from walking.

Therefore, United Spinal highly recommends health insurance providers consider the use of powered exoskeleton devices as medically necessary for eligible individuals with spinal cord injuries who meet the FDA indications for use and complete approved exoskeleton training for either institutional or in-home settings. Additionally, powered exoskeletons have demonstrated safety and effectiveness in both institutional and in-home settings. United Spinal supports continued research and innovation. However, we recommend that these devices not be summarily categorized as an experimental or investigative device when evaluating coverage.