



## Effectiveness of Supported Employment for Veterans with Spinal Cord Injuries: Results from a Randomized Multisite Study

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### ABSTRACT

**OBJECTIVE:** To examine whether supported employment (SE) is more effective than treatment as usual (TAU) in returning veterans to competitive employment after spinal cord injury (SCI). **DESIGN:** Prospective, randomized, controlled, multisite trial of SE versus TAU for vocational issues with 12 months of follow-up data. **SETTING:** SCI centers in the Veterans Health Administration. **PARTICIPANTS:** Subjects (N=201) were enrolled and completed baseline interviews. In interventional sites, subjects were randomly assigned to the SE condition (n=81) or the TAU condition (treatment as usual-interventional site [TAU-IS], n=76). In observational sites where the SE program was not available, 44 subjects were enrolled in a nonrandomized TAU condition (treatment as usual-observational site [TAU-OS]). **INTERVENTIONS:** The intervention consisted of an SE vocational rehabilitation program called the Spinal Cord Injury Vocational Integration Program, which adhered as closely as possible to principles of SE as developed and described in the individual placement and support model of SE for persons with mental illness. **MAIN OUTCOME MEASURES:** The primary study outcome measurement was competitive employment in the community. **RESULTS:** Subjects in the SE group were 2.5 times more likely than the TAU-IS group and 11.4 times more likely than the TAU-OS group to obtain competitive employment. **CONCLUSIONS:** To the best of our knowledge, this is the first and only controlled study of a specific vocational rehabilitation program to report improved employment outcomes for persons with SCI. SE, a well-prescribed method of integrated vocational care, was superior to usual practices in improving employment outcomes for veterans with SCI."

### RESEARCH HIGHLIGHTS

- In 2004, the VHA implemented a large-scale initiative to provide evidence-based supported employment (SE) to veterans with serious mental illness (SMI). Reviews of controlled studies show that evidence-based SE is one of the most robust employment interventions available for persons with serious mental illness (SMI). Recognizing the value evidence-based SE has on gaining employment for veterans with SMI, the researchers study evidence based practice SE (EBP-SE) on veterans seeking employment who have a spinal cord injury.
- In 2012, this study was the first of its kind to study the effectiveness of any type of vocational rehabilitation (VR) intervention after a spinal cord injury. Additionally, this study was the first prospective, multisite, randomized controlled trial of SE versus standard VR care in a population of veterans with SCI.
- Veterans who were provided supported employment were 2.5 times more likely than veterans in the treatment as usual-interventional site (TAU-IS) group and 11.4 times more likely than the treatment as usual-observational site (TAU-OS) group to obtain competitive employment. These findings demonstrate that SE is more effective than standard vocational care in improving employment outcomes for veterans with SCI who wish to return to work.

## IMPLICATIONS

### FOR PRACTICE

Findings show that veterans who participated in SE programs were more likely to be employed with a competitive job. In addition to SCI, supported employment programs offered through the VA service many conditions, such as PTSD, schizophrenia, and homelessness. Thus, veterans seeking employment should enroll in a supported employment program at their local VA. Recognizing the value veterans add, employers should continue working with the VA to place qualified veterans. Employers with any questions regarding veterans with a mental or physical illness or condition should contact the VA.

### FOR POLICY

Given the effectiveness of support employment programs for veterans with SCI, the VA might recommend that veterans with SCI participate in SE soon after they have begun recovering from the injury. Policymakers might partner with the VA to ensure that veterans in rural areas are allotted opportunities to participate in SE. Similarly, policymakers might allocate funds to create more SE programs for non-veterans with mental or physical disabilities who are seeking employment. To ensure the success of the programs, policymakers might require that SE programs be developed in healthcare centers, such as hospitals and clinics. Offering SE services in these centers has proved effective for the VA because the vocational specialists are consistently accessible, even after the veteran is employed.

### FOR FUTURE RESEARCH

This study was potentially limited by the study population, how employment was defined, and the geographic regions selected for enrollment in this study. Future researchers should address these limitations by broadening the study population to include veterans not receiving services at a VA. Researchers should also evaluate revising the definition of employment (job paying minimum wage or higher) and expand geographic regions to ensure a sample that is representative of veterans across the US. Similarly, the sample used in this study was mostly urban, which might have impacted the availability of jobs and transportation to jobs. Future researchers should evaluate the effectiveness of SE for veterans with SCI who reside in rural areas. This study consisted primarily of male veterans, which might not be reflective of the population of individuals with SCI who are seeking employment. In future research on this subject, it would be beneficial to collect additional information on the population of veterans with SCI seeking employment, specifically the percent of female veterans with SCI. Considering the small percentage of female veterans, it might be necessary to oversample female veterans with SCI to pick up on any subtle challenges they encounter while seeking employment and how SE helps. Another limitation of this study was that the second control group (treatment as usual-observational site) was not randomly assigned, despite randomization occurring in the experimental group and the first control group (treatment as usual-interventional site). Future studies should include randomization of all groups to reduce bias error. Additionally, some of the sites might have varied in the employment interventions offered to veterans with SCI who were receiving SE. Future researchers should standardize the interventions offered at each site. Despite attempting to model real world conditions, there is a possibility that some of the models of care are not fully reflective of real-world conditions in the treatment as usual groups. To capture more long-term effects of SE, future researchers should use longitudinal data. There is a strong possibility that TAU models could greatly benefit from more vocational care. Future researchers should evaluate if additional vocational care increases the effectiveness of TAU for veterans with SCI seeking employment.

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