

Translating the Evidence on Individual Placement and Support (IPS) into Practice

Applications with Spinal Cord Injury

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Objectives

1. Review the research on use of IPS with persons with Spinal Cord Injury (SCI).
2. Evaluate the unique aspects of applying the IPS model with individuals with SCI.
3. Discuss guidelines for successful implementation of IPS in SCI settings.

Presenters

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Research on IPS in SCI

Introduction to SCI

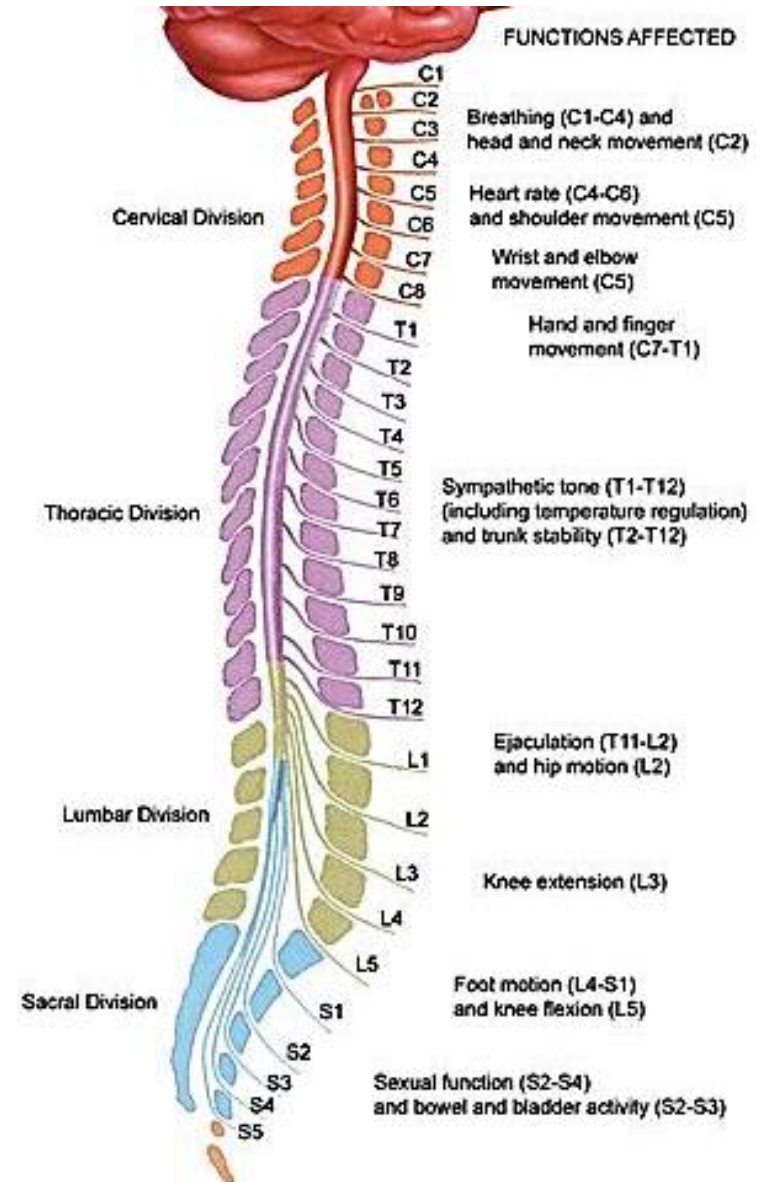
Employment outcomes

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May 12, 2017

Overview of SCI

- SCI disruptions
 - Movement
 - Sensation
 - Autonomic nervous system function
- SCI effects
 - Altered reflexes
 - Impaired breathing
 - Impaired bowel or bladder function
 - Loss of pain
 - Muscle paralysis
 - Lost sense of temperature and/or touch

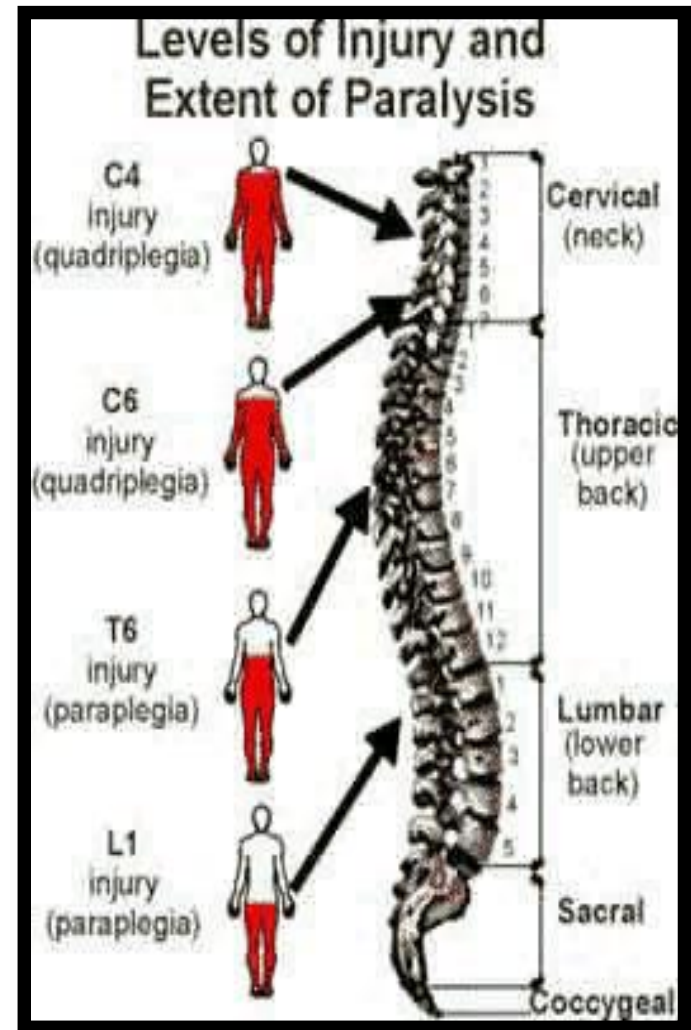


Factors Affecting Extent of Disability

- Level and severity of injury
- Specific nerve fibers injured
- Associated complications
- Pain, spasticity, contractures
- Musculoskeletal injury
- Cardiac disease
- Patient's motivation, age, and resources

Level of Injury

- ***Tetraplegia (quadriplegia):*** Impairment or loss of motor and/or sensory function in all four extremities
- ***Paraplegia:*** Impairment or loss of motor and/or sensory function in chest, abdomen and/or the lower extremities



Severity of Injury



Photo by Ryan K. Morris

Function depends on level and extent of injury

- **Complete:**
No motor or sensory function below the injury.
- **Incomplete:**
Partial motor and/or sensory function below the injury.

SCI Rehabilitation

- Goals
 - Prevention of secondary complications
 - Maximization of physical functioning
 - Reintegration into the community
- Interdisciplinary Team Care
- Patient Centered

Employment and SCI

- Most people with SCI want to return to work (RTW).
- Rates of employment low
 - 35% ever worked post-injury
 - 10% currently working

(Ottomanelli & Lind, 2009)

Dismal Unemployment

“We have seen incredible changes over the years in restoration of function, advancement in the possibility of finding a cure, improvements in assistive technology, the ADA [Americans with Disabilities Act of 1990], civil rights, housing, and transportation. It’s ironic that after all these years and all this hard work, here we are today with the same *dismal unemployment* rate we had among vets with SCI that we had 20 to 30 years ago.”

- John Bollinger, Former Deputy Executive Director of Paralyzed Veterans of America

(Ottomanelli L. et al., 2007)

Systematic Reviews

- Profound lack of interventional studies on employment in SCI
- Strongest evidence for an effective vocational intervention is the randomized controlled trial on Individual Placement and Support (IPS) supported employment

(Trenaman et al., 2014; Roels et al., 2016)

Emergence of the Evidence-Based Practice of IPS

- Supported employment (SE)
 - Emerged in 1980s as intervention for people with serious mental illness (SMI).
 - Federal term: general job supports.
- Individual Placement and Support (IPS)
 - Over next two decades, evolved as the most standardized and researched approach to SE for people with SMI.
 - SAMHSA*: Evidence-based practice with multiple service components.
 - 2003: National implementation in VHA for SMI.

*Substance Abuse and Mental Health Services Administration

The Spinal Cord Injury Vocational Integration study (SCI-VIP), 2010-2015

- 1st controlled study of vocational interventions in spinal cord injury
- 1st study of IPS in a population of persons with a primary physical disability
- Tested whether IPS is better than the usual vocational approach for improving employment in SCI.

Testing a Paradigm Shift

CONVENTIONAL

- Referrals for Vocational Rehab (VR) made after SCI Rehab completed.
- Little/no connection
- Stepwise approach
 - Independent Living
 - Skills training
 - Pre-Vocational training
 - Transitional Employment

IPS

- Employment services delivered as part of SCI rehab.
- Integrated model
- Rapid engagement in finding competitive employment
 - Job development
 - Community based

Application of IPS Principles to SCI Care for Veterans

IPS Principle	Application in SCI Center
Integrated Treatment	Vocational services integrated with clinical SCI care.
Zero Exclusion	Eligibility based only on desire for work regardless of levels of SCI and impairment.
Rapid Engagement	Vocational rehabilitation specialist (VRS) engages Veteran in job search and development vs pre-vocational assessment.
Competitive Employment	Employment in community vs set-aside jobs.
Client Centered	Veteran's preferences guide job search, job carving, and job development to assure job meets preferences.
Community Based	VRS spends up to 70% of time in community for job search and follow along support.
Benefits Counseling	Impact of work on finances and incentives and disincentives explained to Veteran.*
Follow-Along Support	Provided by VRS as part of SCI interdisciplinary team and continued as long as needed to maintain job.

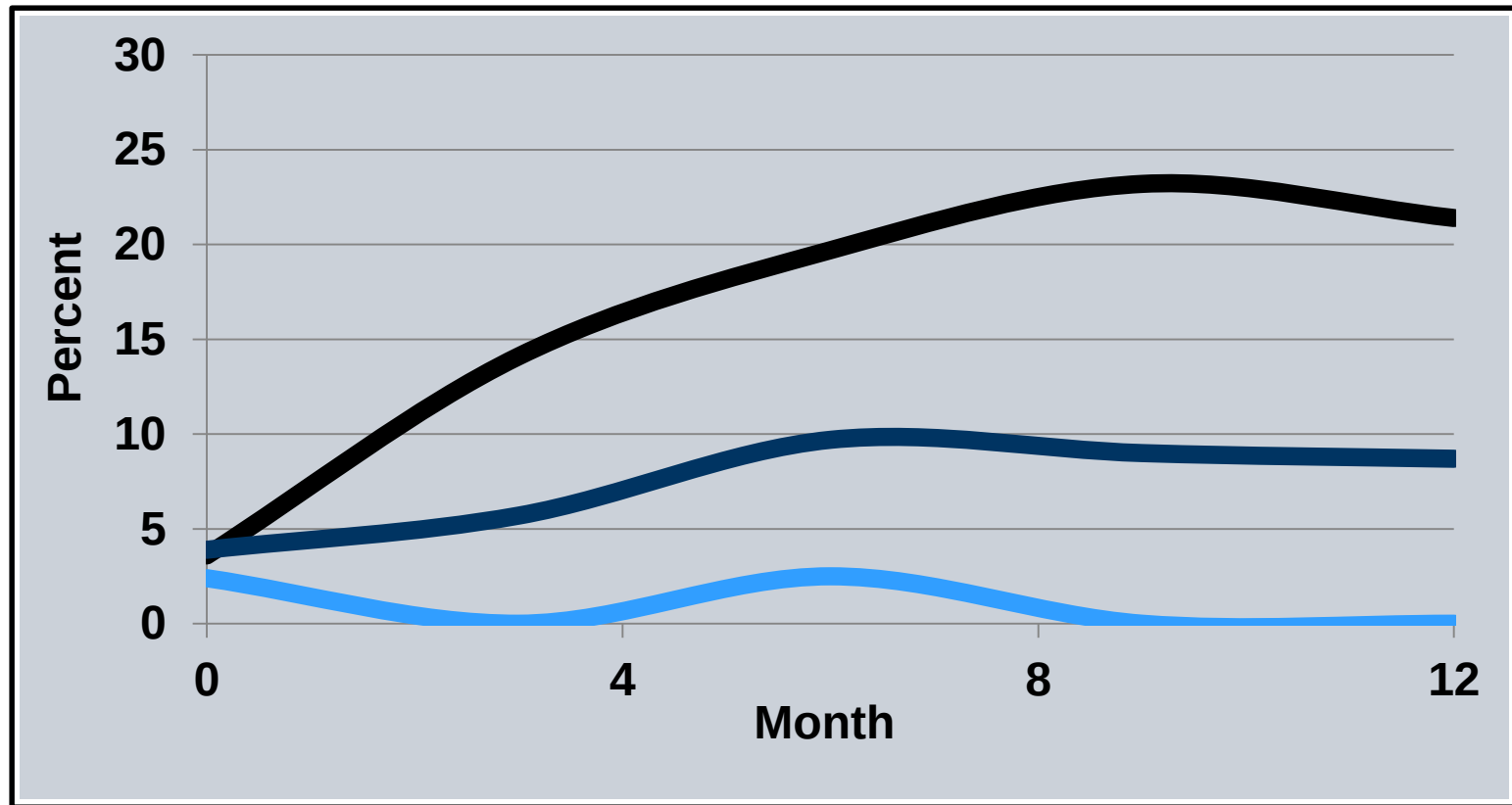
*VA benefits protected if Veteran participates in IPS SE via VA CWT.

(Ottomanelli et al., 2017)

SCI-VIP Methods

- Design: Randomized controlled trial
- Setting: 6 VA SCI Centers in US
- Eligibility: Unemployed, aged 18-65 years, want to work, live within 100 mi of VA
- Participants: 201 Veterans with SCI
 - 81 randomized to IPS and 76 to conventional vocational rehabilitation (VR) at intervention sites
 - 44 conventional VR followed at observation only sites
- Follow up period: 12-months

Veterans Obtaining a Paying Job



- IPS
 - Conventional VR (randomized)
 - Conventional VR(observational)
- (Ottomanelli et al., 2012)

Lessons Learned

- Unemployment treatable in context of medical rehabilitation care
- IPS works for persons with chronic illness
- Keys
 - Awareness
 - Clinical champions
 - Team-based integrated care

(Smith-Morris et al., 2014; Cotner et al., 2017)

Predictive Model Over Time to Employment (PrOMOTE) study, 2010-2015

- Longitudinal study of employment outcomes
- Aims
 - Increase employment rate
 - Improve IPS program implementation
 - Determine impact on health care utilization

(Ottomanelli et al., 2017)

PrOMOTE Methods

- Design: Longitudinal, single-arm, mixed methods study
- Setting: 7 VA SCI Centers in US
- Eligibility: 18-65 years old with SCI (for Baseline Interview) and be unemployed, live within 100 mi of SCI Center, and want to work (for IPS program)
- Participants
 - 1047 baseline interviews
 - » 279 IPS services (66 from SCI-VIP study)
 - » 484 qualitative interviews
- 24-month follow up

Notable IPS Participant Characteristics

- Both outpatients (76%) & inpatients (24%) enrolled
- Wide range of functional impairments
 - level (paraplegia and tetraplegia) and severity (complete loss to some degree of movement or sensation) of injury.
 - for mobility: from power wheelchair to ambulation
- Traumatic Brain Injury history, over half (59%)
- Common mental health conditions including, depression (35%) and substance abuse (20%)
- **BOTTOM LINE:** heterogeneous sample of ‘typical patients’ treated in VHA healthcare system for SCI

Results

- Overall employment rate: 43.2%
 - 92 of 213 obtained jobs
 - Total competitive jobs obtained: 115
- Employment duration during study: 9.5 months (average)
- Hours worked
 - Part time: 83.6%
 - Full time: 16.3%

Wide Range of Jobs

- Job development (i.e., One Veteran, One job)
- Examples:
 - Community jobs: graphic designer for video gaming company, police dispatcher, sports stadium customer service, teachers from preschool to college level including one who taught English as a second language to Japanese students via skype, rehabilitation peer mentors, craftsmen, mechanic, retail customer service, electrical engineer
 - Self employed: working at home, started their own businesses
 - VA: Pharmacy, Education, Police, Executive office

Quality of Life Changes: Improved Mobility, Productivity, and Social Participation,

"The [SE program] got me back to work. I was very bored. I don't like sitting around."



"Returning to work and interacting with various people has been so rewarding for me."

"I think [SE] has brought a lot of [pride] to me. I can show my kids, just because I am paralyzed doesn't mean my life ends. It's not about the money obviously, it is about being able to contribute and give something back..."



IPS participant quotes not necessarily from those individuals pictured here (Cotner et al., 2014; Ottomanelli et al., 2015)

Choosing Employment Services for SCI

MOST EFFECTIVE

- *Integrated services*
- Action oriented
- Community based
 - Job development
 - Job placement
 - Employment supports and follow up in the workplace

LEAST EFFECTIVE

- *Traditional models*
 - Work readiness
 - Work hardening
- Office based
 - Interviews
 - Case management
 - Assessment
 - Vocational counseling

(Ottomanelli et al., 2015)

Conclusions

- IPS effectively improves employment outcomes and quality of life for persons with SCI
- IPS worked in a chronically unemployed population of persons with medical, cognitive, and mental health conditions
- Persons with SCI benefit from integrated and ongoing employment services to address vocational goals as part a complete program of lifelong medical rehabilitation care

Policy Implications

- Broadly
 - Address employment early in rehabilitation
 - Foster connections between vocational providers and healthcare teams
- VHA
 - Supports integrated vocational services for Veterans with mental *AND/OR physical impairments*
 - » Evidence-informed employment services
 - » Community-based competitive employment
 - Recognizes need for community partnerships

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Evaluating the unique aspects of providing Individual Placement and Support Model with Spinal Cord Injured patients

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Points of Discussion

- Professional Standards of Practice in SCI Rehabilitation
- Discuss Individual Placement and Support Model
- Vocational Integration Aspects of SCI Patients
- Distinctive Vocational Characteristics of Spinal Cord Injury Patients
- Addressing Medical Issues and Complications
- Benefits and Motivation

Professional Standards

Heather F. Russell, Elizabeth J. Richardson, Charles H. Bombardier, Thomas M. Dixon, Toby A. Huston, Jon Rose, Dawn Sheaffer, **Shaun A. Smith** & Philip M. Ullrich (2016): Professional standards of practice for psychologists, social workers, and counselors in SCI rehabilitation, The Journal of Spinal Cord Medicine

<http://www.academyscipro.org/Public/PSWCStandardsOfPractice.aspx>



Individual Placement and Support (IPS)

Vocational Rehabilitation is considered an **integral component** of the Spinal Cord Injury (SCI) health system rather than a separate service.

The goal of IPS is **competitive employment** in integrated work settings

People who have sustained a SCI can obtain and succeed in competitive jobs directly, **without pre employment training**.

Vocational assessment is **continuous and based in the work place**



Individual Placement and Support (IPS)

Follow-along supports continue for a time **that fits the individual**, rather than terminating at a set point after starting a job.

Job finding, disclosure, and job supports are based on a **client's preferences**

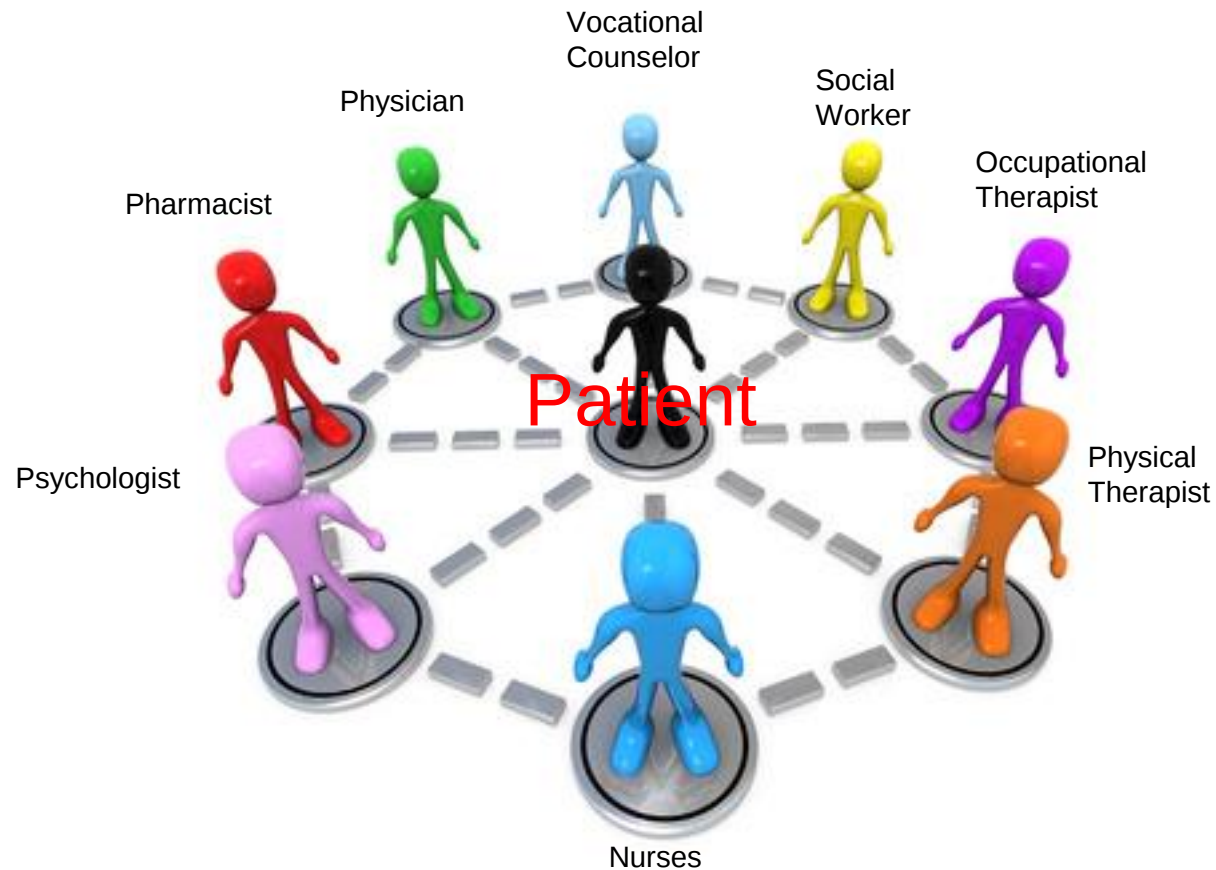
Services are provided in the **community**

A **interdisciplinary team approach**, rather than parallel interventions



Vocational Integration Aspects of SCI Patients

Spinal Cord Injury Patients have a large treatment team

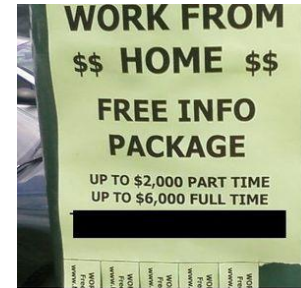
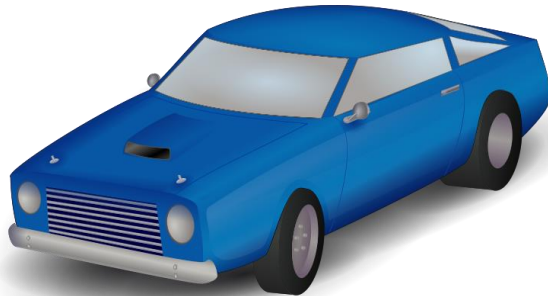


Distinctive Vocational Characteristics of Spinal Cord Injury Patients

- Advocating and Disclosure
- Work at home



- Transportation

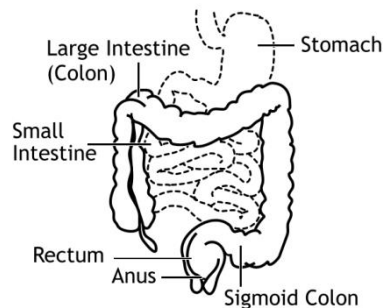


- Assistive technology

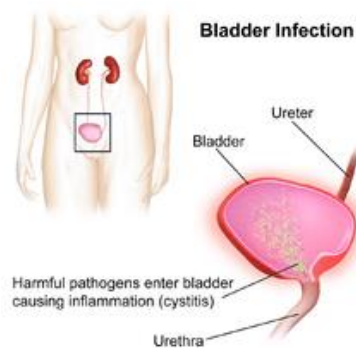


Addressing Medical Issues and Complications

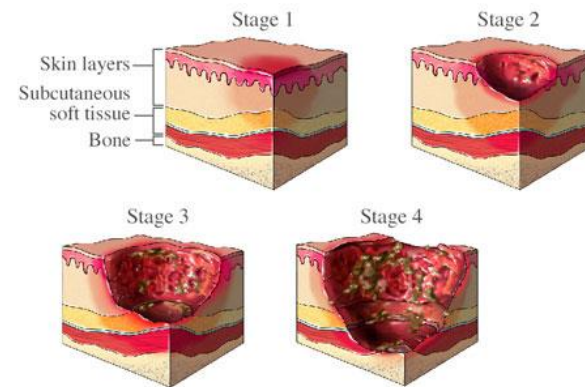
- **Bowel**



- **Bladder**



- **Pressure Ulcers**



- **Spams and Pain**



Benefits and Motivation

- Benefit
 - SSI
 - SSDI
 - Veteran Benefits
 - Workers Comp
- Motivation to Work



Key Elements for Successful IPS Implementation in SCI



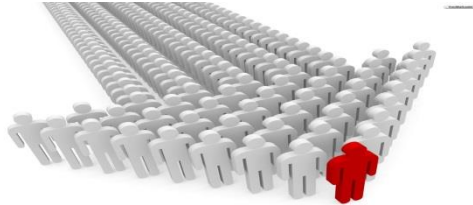
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Key Elements

1) Leadership Buy-In and Active Support



2) Effective Vocational Provider(s)



3) Vocational and Clinical Integration

4) Adequate Support for Vocational Provider(s)



Leadership Buy-In and Active Support



- Understanding of the IPS model, its principles and validity
- Support for integration of care, modeling for staff
- Identifying key staff/clinical champions who embrace model and can bring peers on board
- Resources (space on SCI unit, laptop, cell phone)
- Liaison with facility leadership, to educate those in policy-making positions about the value of IPS in SCI
- VR leadership approval/ buy-in, to enable cross-organization partnerships to streamline services

Effective Vocational Provider(s)



- Positive attitude and high expectations
- Able to “sell” job seeker/believes in job seeker’s abilities and contributions (marketing orientation)
- Connected in the community
- Able to pull together the people and supports needed by job seeker to obtain and maintain employment

Effective Vocational Provider(s) Continued

- Able to synthesize info about job seeker to identify meaningful employment options
- Cultural competency
- Ability to interact confidently with clinical peers
- Flexible, reliable, independent/autonomous



Vocational and Clinical Integration

- Vocational & clinical integration = IPS model principle
- Paradigm shift – moving from “silos” and referrals to collaborative care
- Job seeker guides process/active participant
- Vocational provider is member of clinical team



Vocational and Clinical Integration Continued



- Employment plans address all aspects of individual's functioning/life
- Relationships among all providers are cultivated; mutual learning and respect
- Interdisciplinary approach helps to satisfy the unique needs of people with SCI who go to work

Adequate Support for Vocational Provider(s)

- Vocational program support and collaboration
- Peer consultation
- Education on SCI
- Local supervision + implementation guidance
- Mentoring on job development
- Quality improvement assessment on adherence to principles and standards





Example of Success: Using all the Key Elements

- Houston VA Medical Center SCI Unit

- Leadership Buy-In and Active Support:
 - SCI Chief and Clinical Champion helped develop culture, participated in team meetings, ensured response to quality improvement recommendations
 - Hospital leadership kept in loop via quality improvement assessment briefings
 - Pursuit of FT Voc Provider position based on early numbers, confidence in approach
- Effective Vocational Provider:
 - Background upon hire (SCI + Supported Employment)
 - Characteristics, development of work style, clinical peer relationship building, relationship with Compensated Work Therapy (CWT) program
 - Sales orientation/comfortable with employers and in community

- Vocational and Clinical Integration:
 - Strong foundation, many disciplines represented
 - Vocational Provider getting to know each colleague
 - Creativity and interest in Veteran employment
 - Seen as “team effort”
- Support for Vocational Provider:
 - Strong support from CWT manager and staff
 - Back-up built in
 - Weekly vocational meetings, brainstorming, sharing employer leads
 - Mentor-trainer assistance to Voc Provider



Resources for Implementation Guidance



- **IPS in SCI Toolkit**
- **Ottomanelli L**, Keleher V, Cotner B, Dirk L. Tools for a Working Life with SCI: Individual Placement and Support (IPS) in Spinal Cord Injury (SCI) Toolkit. 2016 October.
www.cindrr.research.va.gov/CINDRRRESEARCH/investigators_staff/lisa_ottomanelli.asp
- **IPS in SCI Implementation Guide**
- **Ottomanelli L**, Keleher V, Dirk L. IPS supported employment in SCI: implementation guide from the Predictive Model Over Time to Employment (PrOMOTE) Project. 2016 October.
www.cindrr.research.va.gov/CINDRRRESEARCH/investigators_staff/lisa_ottomanelli.asp
- **Article on Barriers and Facilitators to Implementation**
- Cotner BA, Ottomanelli L, O'Connor DR, Trainor JT. Provider-identified barriers and facilitators to implementing a supported employment program in spinal cord injury centers. Disabil Rehabil. 2017 Mar 8:1-7. doi: 10.1080/09638288.2017.1294209. [Epub ahead of print]

Practice Guidelines

Practice Guidelines

What are the benefits of having and using practice guidelines?

- Achieve higher fidelity and better treatment outcomes.
- Help VR practitioners translate and adapt IPS model to the special population of individuals with SCI
- Consolidate practical resources

Practice Guidelines

What type of information should such guide include?

- Scientific and professional information by categorized by level of evidence
- Recommendations for assessment and intervention.
- Consideration of means for monitoring/evaluating programs for adherence to standards and quality improvement would be important”

Practice Guidelines

Who should be involved in developing such guide?

- Expert panel encompassing individuals from the multiple disciplines that deliver services
- Individuals who demonstrated leadership in the topic area
- Core workgroup with input and guidance from multiple organizations to achieve consensus.

Thank you for participating!

Wrapping Up

- We invite you to:
 - Provide your input on today's webcast
 - Share your thoughts on future webcasts topics
 - Participate in the Community of Practice to continue the dialogue
- PLEASE CONTACT US:

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Please fill out the brief evaluation form:

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